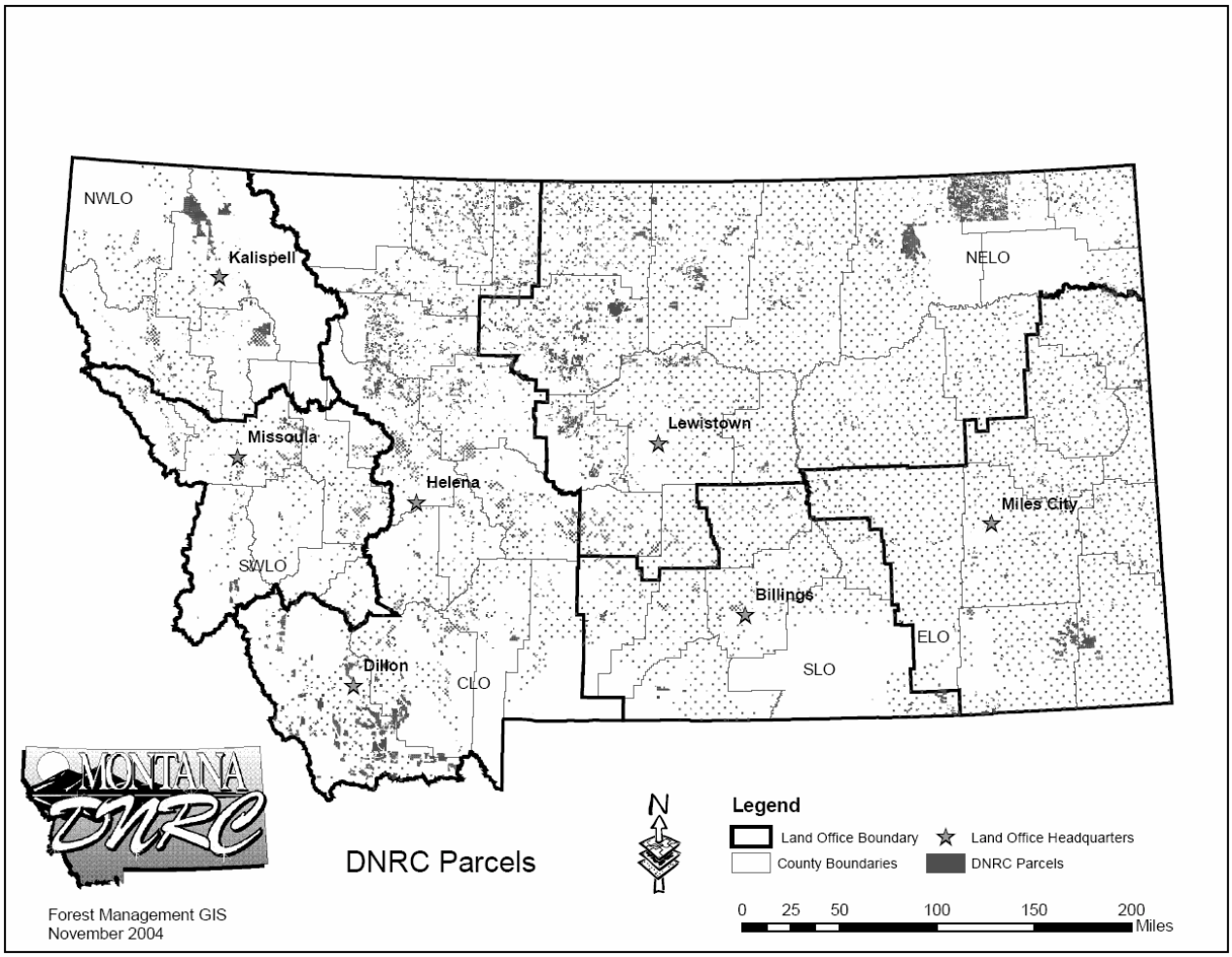
Report on
Return on Asset Value by Trust and Land Office for State Trust Lands

Fiscal Year 2004

November 2004

Prepared By
Trust Land Management Division
Department of Natural Resources and Conservation



ABBREVIATIONS AND ACRONYMS USED IN THIS REPORT

ACB – Montana State University 2nd grant
ACI – Montana State University Morrill grant
CS – Common Schools
DDA – Deaf & Blind School
PB – Public Buildings
SM – School of Mines
SNS – State Normal Schools
SRS – State Reform Schools
Univ – University of Montana

A&GB – Agriculture and Grazing Bureau
DNRC – Montana Department of Natural Resources and Conservation
FMB – Forest Management Bureau
MMB – Minerals Management Bureau
REMB – Real Estate Management Bureau
CLO – Central Land Office
ELO – Eastern Land Office
NELO – Northeastern Land Office
NWLO – Northwestern Land Office
SLO – Southern Land Office
SWLO – Southwestern Land Office

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RETURN ON ASSETS – TRUST LANDS DIVISION
MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

I. **Introduction.** The FY 2004 Return on Assets Report for the Trust Lands Division contains the earnings on assets for all of the trust beneficiaries for all revenue earned from resource management for fiscal year 2004 and includes the Return on Assets for Classified Forest Lands report required by the Montana State Legislature. The 5.1 million acres of Trust land constitutes the second largest real estate holding in Montana. The Information published in this report should be useful in understanding the financial performance of the trust land bureaus.

The report includes two components. One component examines all revenue sources on the same basis and time frame using a non-legislatively prescribed method of analysis. The second analyzes the return to Classified Forest Lands using the method prescribed by 77-1-223, MCA through 77-1-225, MCA.

The Trust Lands Management Division is in the final stages of implementing a new data management system. The new system continues to improve the data for the report, although the most significant gains in information occurred last year and are incorporated in to this report. For this year no significant changes in the base data such as acreage realignments are needed. Similar to previous reports, the data is most accurate at the total trust and land office levels. The trust by land office data estimates are improved and it will continue to be refined as better quality data that requires fewer estimates becomes available.

The Special Use Bureau has changed its name to the Real Estate Management Bureau to more accurately reflect the changes to its program and the activities for which it has responsibility. Land banking legislation has given the Bureau limited authority to purchase and sell trust lands in order to earn a greater return for the trusts from the lands. In FY 2004 the Bureau has focused much of its efforts on generating a long-term real estate development plan and rules that would be used to implement the new program. This new program is an addition to the Bureaus current program responsibilities. The first transactions to occur under the auspices of the new program are expected in FY 2005.

Note: Tables do not always balance, particularly when rounded numbers are being used. Estimating processes have also resulted in some tables not balancing.

Methodology. The methodology used for this report is identical to that used in the FY 2003 report unless otherwise identified. Changes to methodology are generally specific to a particular estimate, are noted when used, and not of a broad nature.

II Products and Prices. This section discusses the products and prices received by the different bureaus during the fiscal year and where relevant, it discusses broader market issues and prices to provide an explanation of issues the particular bureau is facing.

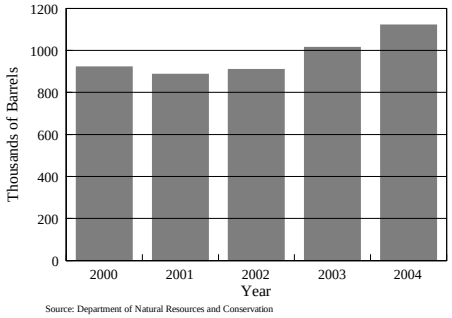
Commodity prices were generally up in FY 2004. The effect of the increased prices has been to increase production where possible. Even with coal, where the prices dropped slightly from FY 2003 levels, production has increased. The effect of the increase in prices as well as in production on most trust lands has been to increase returns to the trusts both in the form of distributable revenue and in the increase valuation of trust assets (See table 1).

Responding to the current world energy supply and demand situation, the production of nearly all energy minerals increased in FY 2004. FY 2004 saw the Minerals Management Bureau's coalbed methane activity increase substantially. Production of coalbed methane was up by a factor of three and the number of producing wells increased from one to six. Production increases occurred for oil, gas and coal as well.

FY 2004 saw the implementation of the higher sustained yield harvest level in the forest management program. The FY 2003 legislative session required that the FMB increase its annual timber sales from 42 to 50 million board feet until a new sustained yield could be calculated. The new annual harvest level will be 53.2 million board feet in FY 2005. Two factors have contributed to the higher production level in FY2004. Higher FY 2004 prices have encouraged production on existing and new sales. A higher FY 2004 sales target has made more timber available to purchasers.

Agriculture and grazing revenue was down slightly in FY 2004 because of a modest decline in grazing lease revenue. A court decision in FY 2004 struck down the statutorily mandated preference right for agricultural and grazing lessees. The Land Board recently adopted new administrative rules that will grant a limited preference right for lessees to renew their lease if they have managed it in a prudent and sustainable manner during the previous term. Future revenues for the Bureau should improve as the Land Banking program is implemented and lands with higher returns are incorporated in the Bureaus programs.

Figure 1a
Montana Department of Natural Resources and Conservation
Oil Production on State Trust Lands 2000 - 2004



Source: Department of Natural Resources and Conservation

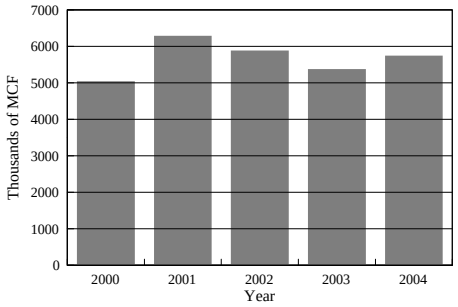
A. Production

- Oil & gas

Figure 1a shows the production of oil from trust lands for the last five years. Oil from state trust lands is produced by private producers who base their production levels on

market price, demand, production costs, the quality of the oil being produced and long term contractual obligations. Oil production has increased in the last three years in response to both higher prices and an increase in the quantity demanded by consumers. The increase in production has the impact of increasing the return on assets for the MMB.

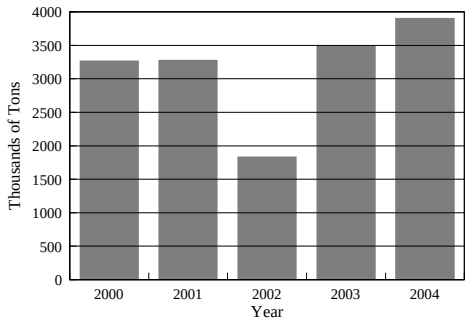
Figure 1b
Montana Department of Natural Resources and Conservation
Natural Gas Production on State Trust Lands 2000 - 2004



Source: Montana Department of Natural Resources and Conservation

Figure 1b shows the production of natural gas from trust lands for the last five years. The general trend in production has been increasing although 2001 was the highest natural gas production year of the period. The continued increase has, in part been stimulated by the general increase in prices.

Figure 1c
Montana Department of Natural Resource and Conservation
Coal Production on State Trust Lands 2000 - 2004



Source: Department of Natural Resources and Conservation

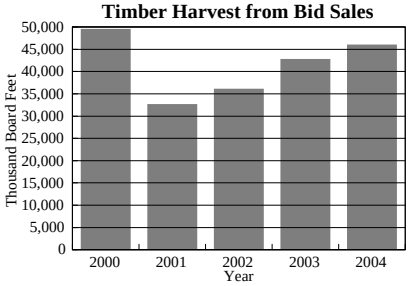
- Coal

Coal production also has increased throughout the period except for 2002. The production of coal in any one year can vary substantially as the mining operations move on and off of state leases. This was the primary reason for the low production level in 2002. Some of the coal produced from Montana trust lands contains comparatively high levels of sodium. This makes the coal more difficult to use and reduces its market value and marketability.

- Timber

Figure 2a displays the timber harvest from bid sales for the period 2000 to 2004. Timber harvests fluctuate year-to-year depending on several factors including current price, expected future price, episodic events such as fires, and the availability of logs from other sources. The harvest for the period 2000 to 2004 was heavily influenced by the large number of salvage harvests that are required by law to be

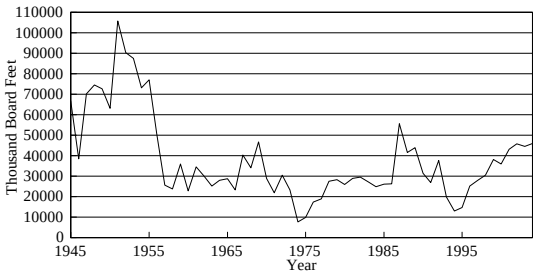
Figure 2a
Montana Deparment of Natural Resources and Conservation
Timber Harvest from Bid Sales



Source: Montana Department of Natural Resources and Conservation

harvested in order to extract as much economic value as possible for the trusts from the burned timber. Since the low harvest levels of FY 2001, the harvest levels have increased every year since and should increase again in 2005 if market prices remain strong. The growth in 2004 was driven by two factors, the increase in sustained yield and the very strong increase in prices in the second half of the year which encouraged harvests of both old and new sales.

Figure 2b
Montana Department of Natural Resources and Conservation
Annual harvest 1945 to 2004



Source: Montana Department of Natural Resources and Conservation

Figure 2b shows the historic harvest level on state lands from 1945 to the present. Current harvest levels appear to be within the "normal" range since 1958, prior to that time harvest levels appear to be much higher.

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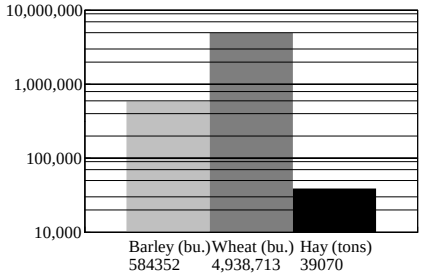
Agriculture production is for FY 2004 is shown in Figure 3. The most important crop for Montana trust land lessees was wheat which had a production level nearly 9 times the amount of the next two highest agriculture commodities. Production levels are important since they impact the amount of revenue received by DNRC from lessees.

Figure 3
Montana Department of Natural Resources and Conservation
Production of Major Crops on State Lands



Source: Montana Department of Natural Resources and Conservation

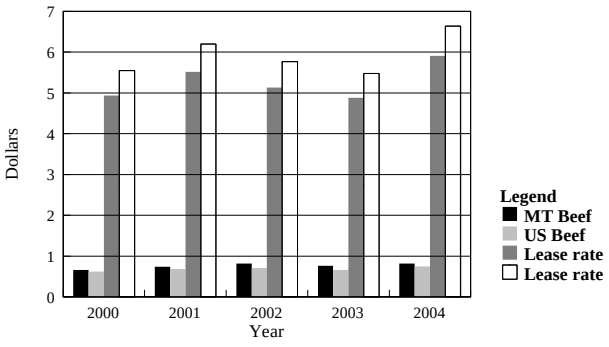
B. Prices

Nearly all of the products produced from trust lands are inputs into the production of another good or asset. Oil and gas are used to power machinery, timber is made into lumber that is used to build houses, etc. This means that the demand for nearly all trust land products is the result of activities that occur in other markets. It is the price and demand for these market goods that plays a major role in determining the prices received for trust land outputs. A second major factor influencing the price is the competition for our goods from other producers of the same or similar goods. In nearly all of the markets in which trust lands goods are sold, the bureaus outputs constitute a small fraction of the total production of the goods supplied to the market. This means the bureaus can do little to influence the prices they receive, i.e. they are "price takers." In order to give some indication of the effect of these influences, the price graphs will include prices of some other factors that are likely to influence the prices received by the different bureaus for their products.

- Agriculture and Grazing

In the case of grazing, the prices received for leases are directly tied to the price of beef. Figure 3a shows the Montana and US fed beef prices compared with the lease rates received by the state trust lands. Since the acres of land leased each does not vary significantly revenue from year to year will vary based primarily on the lease rates. The lease rates are adjusted based on Montana beef prices, the two move together. US beef prices follow much the same pattern except the relationship between US and Montana beef prices changes from year to year. Montana beef prices have generally been above average US beef prices in recent years.

Figure 3a
Montana Department of Natural Resources and Conservation
A Comparison of Beef Prices and Trust Land Lease Rates

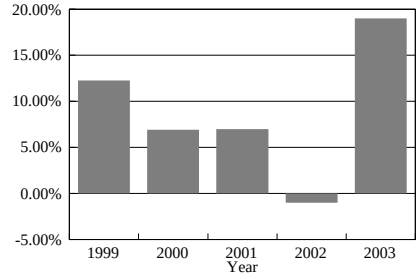


Source: Montana Department on Natural Resources and Conservation

- Real Estate

In the real estate management program most revenue is generated from real estate leasing and licenses, the price indices of housing and commercial properties are used as a price indicator. While lease rates are not directly tied to the housing market, they are tied to the appraised value of the property which is dependent on the overall market value for real property.

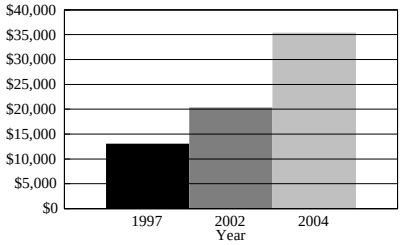
Figure 4a
Montana Deparment of Natural Resources and Conservation
Housing Cost Index



Source: Center for Applied Research, MSU - Billings
and Montana DNRC

Figure 4a exhibits a real estate index based on a Montana housing price index developed from average housing price data supplied by the Center for Applied Research, MSU-Billings. The figure compares the percent increase in residential housing prices for the period 1999-2003. The data indicates the volatility in housing prices within the state. Housing prices increase on average in the state from 1999 to 2001, then declined slightly in 2002 and then increased dramatically in 2003

Figure 4b
Montana Department of Natural Resources and Conservation
Average Appraised Value

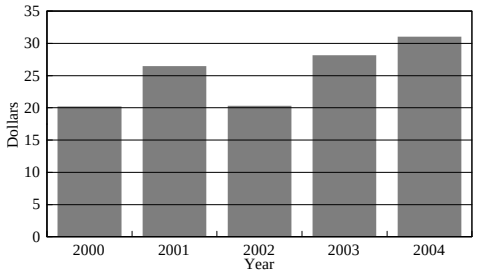


Source: Montana Department of Natural Resources and Conservation

Figure 4b displays the average price for real estate leases in 1997 ($13,089), 2002 ($20,322) and 2004 ($35,411). This increase represents an annual average increase in valuation of 11.2% or 133% for the entire 8-year period.

- Oil & gas

Figure 5a
Montana Department of Natural Resources and Conservation
Prices for Oil Produced on State Trust Lands 2000-2004

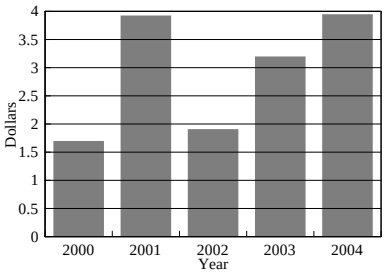


Source: Montana Department of Natural Resources and Conservation

Figure 5a depicts the price received for oil produced on state trust lands. The price trend has generally been up despite the comparatively low price received in 2002. With current world demand and the situation that currently exists in the Middle East it is likely there is little reason to expect oil prices to significantly decline in the near future.

Figure 5b shows the Natural gas prices for the period 2000 to 2004. Prices for natural gas have been consistently increasing during this period with very high prices in 2001 and again in 2004. The high gas prices are the result of several factors. These factors include weather, oil prices, and worldwide demand. Both worldwide and national reserves for natural gas from all sources are quite large, however, low prices for alternative energy sources, coal and oil, have, until recently, helped to keep prices down and delay development of new producing areas. The ability to produce coal bed methane more cheaply than natural gas may again delay its full development.

Figure 5b
Montana Department of Natural Resources and Conservation
Prices for Natural Gas Produced on State Trust Lands 2000 - 2004

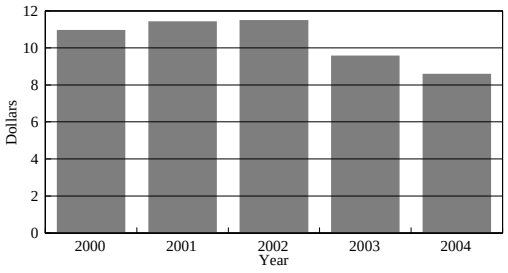


Source: Montana Department of Natural Resources and Conservation

- Coal

Figure 5c illustrates the prices received for coal produced from state lands. The graph indicates that the price received for coal produced on state trust land for the period 2000 to 2004 has been decreasing. This has not been the general trend with coal prices. Nationally coal prices have been nearly level for the last three years. The main reason for decreasing prices for trust land coal is strong, low cost competition from Wyoming, and the high sodium content in some of the coal which limits the pool

Figure 5c
Montana Department on Natural Resources and Conservation
Prices for Coal Produced on State Trust Lands 2000 - 2004



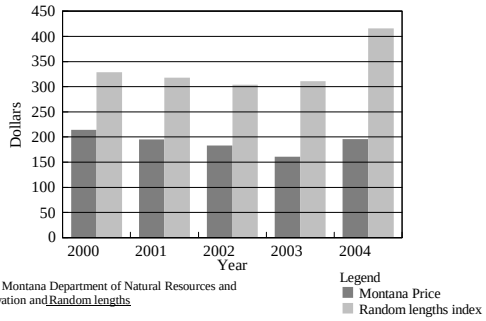
Source: Montana Department of Natural Resources and Conservation

of purchasers with facilities capable of utilizing this coal. Long-term forecasts for coal prices predict stable or slightly declining prices for the future.

-Timber

Figure 6 describes the average stumpage price the state has received for timber harvested on state trust lands for the period 2000-2003 together with the random lengths composite lumber price index. The random lengths index is a wholesale composite index price that reflects both national and regional lumber prices. Both the state prices and the random lengths prices have been declining until 2004 when there was a strong increase. The price increases reflected in both the Random Lengths index and the Montana stumpage price are due to the continuing long term growth in housing in the United States, the weakening of the US dollar which effectively lowers the prices paid to foreigners for there timber, the tariffs imposed on Canadian wood imports and the strengthening of several foreign economies, primarily in the far east. The increase in Montana prices has not been as large as the increase in the Random Lengths index because of the mixture of older sales at old prices and newer sales at the newer higher prices.

Figure 6
Montana Deparment of Natural Resources and Conservation
Timber Stumpage Prices on Trust Lands



Source: Montana Department of Natural Resources and Conservation and Random lengths

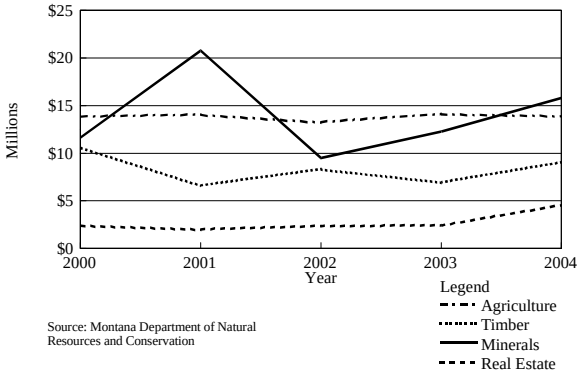
III. Revenue, Expense and Asset appreciation

Total return includes both net revenue and appreciation; however, it does not identify the best income flow to the trusts. Appreciation in land values cannot be used to fund school expenditures, but is considered part of the total return on an asset. The increased land values contribute to the revenue of the trusts only after they are captured through sale or increased rental or lease rates. Passive and non-market values and benefits affect trust land management activity levels, particularly regarding classified timberlands, but they affect other land classifications as well and do not add to the income received for the trust land beneficiaries. This report includes only those activities which return a monetary value to the trusts.

A. Revenue

Revenue-generating activities on trust lands includes timber sales, mineral sales and leases, agricultural sales and leases, and "Real Estate" sales and leases. Each of these activities is reported in the Department of Natural Resources Annual Report. Figure 7 shows the contributions from each source for the last five years. On average, minerals generated the largest amount of revenue, followed in order by agriculture, timber and real estate. Gross revenue from minerals increased substantially in 2003 and 2004 and, if the current trend continues, will replace agriculture as the largest revenue producer. Revenue from real estate and forestry were up significantly and agriculture and grazing revenue declined. The changes in revenue from forestry and real estate reflect the fact that short-term changes in market conditions have a stronger annual impact on forestry revenue than the leases and licenses associated with agriculture, which are based on longer-term market conditions with a relatively fixed amount of resource. Real estate revenue increases are a combination of a changing bureau program emphasis and increased appraisals on current leases.

Figure 7
Trust Gross Revenue by Source
2000 - 2004



Source: Montana Department of Natural Resources and Conservation

Table 1 presents this same information in tabular form. These numbers are presented in the Department of Natural Resources and Conservation's Annual Report for each of the fiscal years[1] except that land sales, trust interest and "other revenues" are not included. Land sales are shown separately in the table, but are excluded from the return on assets calculation because they represent an exchange of assets, money for land. The revenue numbers include a small amount of earnings for non-trust land such as Agricultural Experiment Station lands that are managed by DNRC but do not contribute to trust earnings. These small amounts are deducted from the analysis of the return on assets for the trusts, but are included in the first three tables for comparison and historical purposes. Land sale earnings are shown separately because they are part of bureau revenues but are excluded from the return on assets analysis because they are deposited directly into the Trust permanent fund. Interest income and other revenues are excluded because they do not represent current earnings from trust natural resources.

[1] Fiscal year will always mean "state fiscal year" i.e. July through June and not "federal fiscal year."

Table 1 Montana Department of Natural Resources and Conservation Trust Gross Revenue by Source					
Source	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**
Ag. & Grazing	$13,826,053	$14,018,730	$13,279,949	$14,116,247	$13,887,202
Forest Mgmt.	12,116,479	8,578,175	9,686,844	8,278,792	11,043,525
Minerals Mgmt.	11,643,027	20,777,365	9,501,254	12,282,648	15,810,987
Real Estate	2,087,185	2,008,779	2,302,658	2,367,469	4,454,118
Sub total	$39,672,744	$45,383,049	$34,770,705	$37,045,156	$45,195,833
Land Sales	261,884	0	15,954	19,744	2,900
Total	$39,934,628	$45,383,049	$34,786,659	$37,064,900	$45,272,925
Source: Montana DNRC					

Table 1 represents gross earnings by source; however, the return on assets should represent a net figure, i.e., earnings after expenses are deducted. Table 2 shows the expenses for each trust. Forest improvement expenses are kept separate since they represent funds retained to ensure continuation of long-term forest health and as such are an investment in the program.

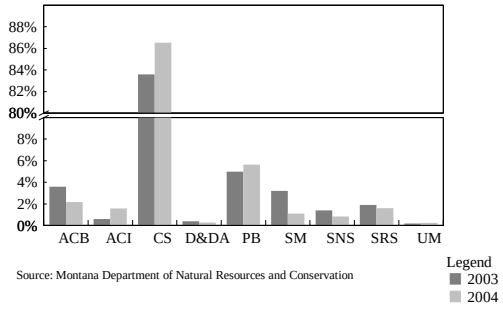
Table 2 Montana Department of Natural Resources and Conservation Net Expenses by Source					
Source	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**
Ag. & Grazing	$853,746	$891,010	$1,182,926	$1,043,273	1,514,686
Forest Mgmt.	3,105,099	3,065,345	3,286,469	3,776,429	4,230,626
Minerals Mgmt.	743,847	629,930	756,104	971,912	641,074
Real Estate	929,343	1,026,356	1,205,447	1,161,081	1,102,429
Sub total	$5,632,035	$5,612,641	$6,430,946	$6,952,695	$7,488,815
Forest Improvement	1,524,822	1,981,597	1,404,363	1,363,664	1,579,519
Total	$7,156,857	$7,594,238	$7,835,309	$8,316,359	$9,068,334
Source: Montana DNRC					

Table 3 shows the net trust fund revenues available for 2000 to 2004. A row showing retained Forest Improvement funds has been included to accommodate the undistributed FI monies for FY 2004. The retained FI money is similar to retained earnings in a business where the retained earnings are earmarked for investment in the future.

Table 3 Montana Department of Natural Resources and Conservation Net Revenue by Source					
Source	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**
Ag. & Grazing	$12,972,307	$13,127,720	$12,097,023	$13,072,974	$12,372,517
Forest Mgmt.	7,486,558	3,531,233	4,996,012	3,138,699	4,783,274
Minerals Mgmt.	10,899,180	20,147,435	8,745,150	11,310,736	15,169,914
Real Estate	1,157,842	982,423	1,097,211	1,206,388	3,351,689
Total	$32,515,887	$37,788,811	$26,935,396	$28,728,797	$35,677,393
Retained FI	$0	$0	$0	$0	$450,106
Does not include reductions for fund reallocations e.g. Permanent Fund. Source: Montana DNRC					

Figure 8 displays the distribution of revenue by each trust for FY 2003 and FY 2004 . The Common School trust receives over four times the revenue from trust land as all of the other trusts combined. In FY 2004 the share going to Common Schools increased slightly while nearly all of the other trust had small decreases. Public Buildings also had a small increase in their share of the FY 2004 gross revenue.

Figure 8
Montana Department of Natural Resources and Conservation
Gross Revenue Distribution by Trust 2003-2004



Source: Montana Department of Natural Resources and Conservation

Estimated gross revenues by Land Office and Trust are shown in Table 4. The gross revenue has had the remaining non-trust revenues deducted so the table does not reflect any revenue for the Agricultural Experiment Station, Galen, General Fund, Montana Department of Transportation, or land sales.

Table 4 Department of Natural Resources and Conservation Gross Trust Revenues by Land Office and Trust FY 2004 (Thousands of Dollars)							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$13	$1	$4	$45	$1	$869	$934
ACI	67	4	96	498	15	6	685
CS	5,344	7,476	11,840	2,916	5,835	3,878	37,289
D&DA	33	1	25	41	1	18	119
PB	218	12	64	393	2	1,742	2,431
SM	114	2	98	259	1	2	476
SNS	74	10	57	210	2	6	358
SRS	205	15	26	121	9	321	698
UNIV	55	6	44	0	0	1	108
Total	$6,123	$7,528	$12,254	$4,483	$5,866	$6,843	$43,097

Compared to FY 2003 gross revenues have increased by nearly $7.5 million. All of the bureaus except agriculture and grazing had increases in their revenue in FY 2004. The largest increase was in the MMB where gross revenues increased by $3.5 million and accounting for nearly 50% of the revenue increase. The largest percentage increase was in the REMB where gross revenue nearly doubled partly as the result of large conservation easement.

B. Expenses

The Trust Lands Management Division is allowed to utilize a portion of the trust receipts to cover part of the costs of managing the trust lands. These funds are a reduction to funds available for trust fund distribution. Table 5 shows these costs without FI prorated on the basis of the Trust Lands Division employee distribution and gross revenue to the trusts.

Table 5
Montana Department of Natural Resources and Conservation
Trust Management Expenses by Land Office and Trust
FY 2004 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$1	$0	$0	$4	$0	$208	$215
ACI	0	0	0	0	0	0	0
CS	827	568	949	2,542	412	1,134	6,433
D&DA	2	0	2	8	1	3	15
PB	70	1	62	226	0	197	557
SM	3	1	2	14	0	0	21
SNS	30	6	8	32	0	0	78
SRS	26	14	18	66	4	39	166
UNIV	2	0	0	0	0	1	4
Total	$962	$592	$1,042	$2,892	$418	$1,583	$7,489

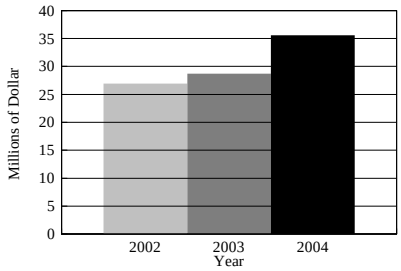
C. Net Revenue

The amounts shown in Table 6 reflect the difference between the revenues collected and the expenses used to administer the program. These are not the amounts distributed to the schools, but an estimate of net earnings by trust. Earnings are redistributed based on distribution criteria associated with each grant.

Table 6 Montana Department of Natural Resources and Conservation Net Trust Revenues by Land Office and Trust FY 2004 (Thousands of Dollars)							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$12	$1	$4	$41	$0	$661	$719
ACI	67	4	96	498	15	6	685
CS	4,517	6,908	10,891	374	5,424	2,744	30,856
D&DA	31	1	24	33	0	15	104
PB	148	10	2	167	2	1,545	1,874
SM	111	1	95	245	1	2	455
SNS	43	4	48	178	2	5	280
SRS	179	2	8	55	4	282	531
UNIV	53	6	44	0	0	0	103
Total	$5,161	$6,936	$11,212	$1,590	$5,448	$5,261	$35,608

Figure 9 displays the net revenue for FY 2002 - FY2004. Revenue was up from $28,729,000 in FY 2003 to $35,608,000 in FY 2004. This increase will later reflect on the rate of return on assets in total.

Figure 9
Montana Department of Natural Resources and Conservation
Net Revenue for FY 2002 - FY 2004



Source: Montana Department of Natural Resources and Conservation

D. Asset Value and Appreciation

Total asset value represents the sum of all asset values from each of the revenue earning activities associated with trust lands. The detail of these estimates is found in the appendix. The results of the aggregation are found in the following tables.

Table 7 Montana Department of Natural Resources and Conservation Surface Acres by Area Office and Trust FY 2004 (Thousands of Acres)							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	9	0	0	12	0	10	31
ACI	38	0	15	3	4	3	63
CS	976	961	1,913	227	381	174	4,632
DB	23	0	4	9	0	1	36
PB	100	2	14	41	0	31	187
SM	26	0	19	11	0	4	59
SNS	31	1	18	10	0	4	63
SRS	47	0	11	1	3	5	68
UM	4	3	9	0	0	2	19
Total	1,253	967	2,003	315	388	234	5,159

Table 7 shows the total surface acreage by land office and trust. This information was used to prorate assets when they could not be directly allocated from revenue or other data. Only minor adjustments were made to the acreage distribution table this year.

Table 8 shows acreage by land office and revenue-generating activity. The largest share of trust lands, both surface and subsurface (mineral), is in the Northeastern Land Office.

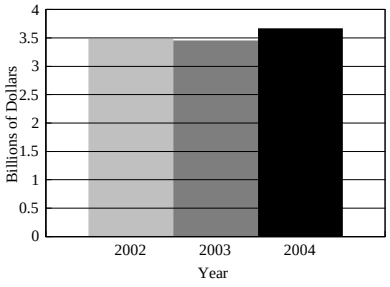
Table 8 Montana Department of Natural Resources and Conservation Classified Acres by Land Office and Bureau FY 2004 (Thousands of Acres)							
	Land Office						
Bureau	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
Ag & Grazing	1,207	966	2,001	17	386	82	4,659
Forest	31	0	1	296	0	151	479
Minerals	1,761	1,020	2,439	354	444	283	6,302
Real Estate	15	0	1	2	2	1	21

The asset value for the lands in each region by trust is shown in Table 9. This asset value is based on all sources and adjusted for possible use conflicts. The asset values for minerals have been added to the surface asset values, since there is little use conflict. Some mineral values occur where there is no surface ownership (4% - 6% on average). Mineral values are combined into the surface values in all tables.

Table 9 Montana Department of Natural Resources and Conservation Asset Value by Land Office and Trust FY 2004 (Thousands of Dollars)							
	Land Office						
	CLO	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	7,244	0	0	10,794	0	5,660	23,697
ACI	21,409	270	10,479	2,907	1,869	1,410	38,344
CS	680,991	626,084	1,559,535	187,433	224,137	68,905	3,347,087
D&DA	13,361	0	3,234	7,645	0	291	24,532
PB	59,726	792	8,155	33,858	0	10,845	113,375
SM	19,759	128	12,530	10,188	0	1,033	43,637
SNS	15,907	370	11,931	8,136	0	1,507	37,852
SRS	18,532	79	6,400	1,393	1,566	2,178	30,148
UNIV	2,613	2,570	6,541	262	243	489	12,717
Total	839,541	630,294	1,618,804	262,617	227,816	92,318	3,671,390

In the case of minerals, a capitalized value or a discounted reserve value is used since the mineral estate is largely subsurface and has few other marketable values. Real Estate Management Bureau lands are largely valued through appraisal processes that consider not only the specific use associated with the lease but other market valuations. Agricultural land valuations are based on the "2000 Agricultural Lands Appraisal" done by the Montana Department of Revenue for the purpose of assessing property tax on agricultural properties. The method used is to capitalize the agricultural values of the land. Finally, the timber appreciation is based on the method identified in 77-1-225 MCA, but without the averaging over time. Appreciation is distributed to each land office and trust based on a weighted average of the acreage in each "source."

Figure 10
Montana Department of Natural Resources and Conservation
Assets FY 2002-2004

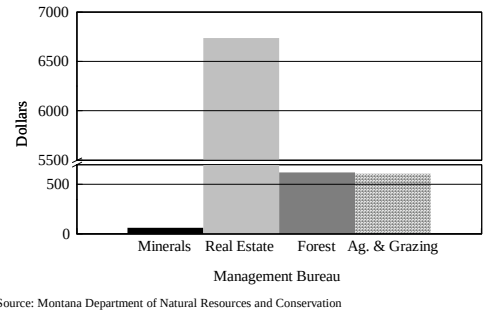


Source: Montana Department of Natural Resources and Conservation

This year's asset total value is higher than last years primarily because of the increase in resource prices. Figure 10 compares assets for FY 2002 through FY 2004. Even with the increase in resource prices, the asset value does not show a large change in value.

Figure 11 displays the average asset value per acre by "Management Bureau." The comparatively large asset value per acre for Real Estate ($6,735) is the result of the substantial proportion of the Real Estate acreage contained in the high value per acre cabin site program. The low value for minerals ($62) is a result of the large number of acres that have not been identified as containing commercial mineral values. Forestry and Ag & Grazing have, on average, very similar per

Figure 11
Montana Department of Natural Resources and Conservation
Average Asset Value per Acre by Management Bureau



Source: Montana Department of Natural Resources and Conservation

acre values of $621 and $608, respectively. Because of the higher resource prices, all of the asset values per acre for all bureaus has increased from 2003 levels.

Total net revenue is from all sources; timber, minerals, real estate and agriculture. Revenue is allocated by ownership and Land Office with the revenue from minerals allocated to the surface ownership

The total return shown in Table 10 includes net revenue and an asset appreciation value when appropriate. In many cases the appreciation of the asset exceeds the direct earnings of the asset. Both values are summed in the table.

Table 10
Montana Department of Natural Resources and Conservation
Total Return by Land Office and Trust
FY 2004 (Thousands of Dollars)

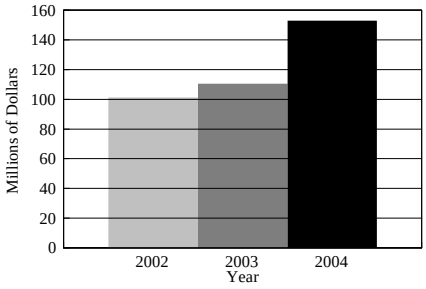
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$246	$1	$4	$221	$0	$786	$1,257
ACI	641	14	557	545	66	30	1,853
CS	21,799	29,066	70,286	3,551	10,991	3,987	139,680
D&DA	385	1	137	161	0	22	706
PB	1,673	36	224	726	2	1,726	4,387
SM	625	5	651	429	1	19	1,730
SNS	493	19	469	314	2	31	1,328
SRS	674	5	232	78	44	323	1,356
UNIV	132	87	368	5	8	9	609
Total	$26,668	$29,234	$72,928	$6,031	$11,114	$6,932	$152,906

This year's total return is larger than last years reflecting the higher resources prices and increased volumes sold in nearly all of the resources. This year's net revenue is over seven million dollars higher than last years net revenue.

Figure 12 portrays the return on assets for FY 2002, FY 2003 and FY 2004 The return on assets is higher in FY 2004 because of the large increase in resource prices and the increased appreciation associated with higher valued resources.

Table 11 shows the rate of return on assets for all Trust Lands. The total return statewide is 4.16%. Generally areas with the highest mineral values have the highest rates of return. Unusually high rates of return are often indicative of a one-time occurrence or windfall. The overall distribution of assets tends to be more accurate than the detail distribution which is highly dependent on land ownership patterns.

Figure 12
Montana Department of Natural Resources and Conservation
Return on Assets 2002 - 2004



Source: Montana Department of Natural Resources and Conservaton

Table 11
Montana Department of Natural Resources and Conservation
Rate of return on Assets by Land Office and Trust
FY 2004

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	3.39%	0.00%	0.00%	2.04%	0.00%	13.88%	5.30%
ACI	2.99%	5.21%	5.31%	18.75%	3.51%	2.16%	4.83%
CS	3.20%	4.64%	4.51%	1.89%	4.90%	5.79%	4.17%
D&DA	2.89%	0.00%	4.22%	2.10%	0.00%	7.41%	2.88%
PB	2.80%	4.60%	2.75%	2.14%	0.00%	15.91%	3.87%
SM	3.16%	4.20%	5.19%	4.21%	0.00%	1.80%	3.96%
SNS	3.10%	5.09%	3.93%	3.86%	0.00%	2.06%	3.51%
SRS	3.64%	5.81%	3.62%	5.60%	2.83%	14.83%	4.50%
UNIV	5.05%	3.38%	5.63%	1.83%	3.27%	1.86%	4.79%
Total	3.18%	4.64%	4.51%	2.30%	4.88%	7.51%	4.16%

This year's rate of return on assets is 30% higher than last years primarily due to the effects of increased resource prices. The higher prices increased both the net revenue contribution to total assets but also increase the estimated appreciation associated with those activities yielding higher returns.

V. SUMMARY

Table 12 gives the returns based on revenue and total asset values by revenue source. A large part of the return is from appreciation and not net revenue. The rate of return from revenue is 0.97% of the asset value. This is slightly higher than last years return from revenue of 0.83%. The overall rate of return on assets is 4.2%, reflecting the additional values from land appreciation. This year's rate of return is nearly 1% higher than last year's return of 3.2%. The overall rate of return is up by 38% over last year reflecting the much higher resource prices in FY 2004 compared to prices in FY 2003

Table 12
Montana Department of Natural Resources and Conservation
Trust Returns by Net Revenue and Total Return[2]
FY 2004 (Thousands of Dollars)

Source	Net Revenue	% of Assets	Appreciation	% of Assets	Total Return	% of Assets
Ag & grazing	$12,372	0.44%	$108,028*	3.35%	$135,449*	4.2%
Forests	$4,783	1.61%	$4,966*	1.66%	9,789*	3.3%
Minerals	$15,170	3.85%	$54,317	13.79%	$69,487	17.6%
Real Estate	$3,352	2.33%	$4,303*	2.99%	$7,667*	5.3%
Total	$35,677	0.97%	$117,297**	4.16%	$152,906**	4.2%

*Includes minerals and/or other bureau returns

** In order to avoid double counting, the total includes Ag & Grazing, Forests, and Real Estate values only.

[2] Trust resources are not managed in the same manner as privately held resources. In addition to providing revenue, other social and political issues are considered in most economic decisions associated with managing trust assets. Consequently, evaluating trust performance solely on the basis of the rate of return without considering all of the goals and objectives of trust asset management could lead to inaccurate conclusions about the "financial" management of trust assets.

Return on Asset Value by trust and Land Office for Classified Forest Lands
(77-1-223 - 77-1-225 MCA)
FY 2004

This section fulfills the requirements of 77-1-223 – 225 MCA, which stipulates that each year the Board of Land Commissioners will provide a report based on a specific methodology identifying the average return on revenue to trust beneficiaries from Classified Forest Lands as identified in 77-4-401 MCA as class 2 trust lands[3]. The report must include for each beneficiary:

1. The total acreage of forest land held in trust;
2. A summary of the asset value for the forested lands held in trust;
3. A calculation of the average return from revenue on the asset value for the forested tracts held in trust; and
4. A listing by each Department Land Office of the total forested acreage administered for the trust beneficiary and a calculation for the average return from revenue on asset value for lands designated to the trust beneficiary.

Classified Forest Lands

The amount and distribution of Classified Forest Lands used for this section of the report differs from those shown in Table A -1 in the Appendix because it includes all "classified forestland" if the primary use is timber production. The acres identified in this section of the report will be identical to last year's.

Table FOR - 1
Total Net Forested Acres by Grant and Land Office

	Land Office				
Trust	**CLO**	**NELO**	**NWLO**	**SWLO**	**Total**
ACB	509		11,818	7,944	20,271
ACI			3,354	2,069	5,423
CS	9,511	19	192,784	79,002	281,316
DDA	502		8,309	400	9,211
PB	2,371		38,575	26,366	67,312
SM	1,120		9,818	2,556	13,494
SNS	540		9,366	3,506	13,412
SRS	7,299		1,626	4,488	13,413
Univ			155	322	477
Total	21,852	19	275,805	126,654	424,329

A comparison of the Classified Forest Lands and all trust lands is given in Table FOR - 2. The land distribution by trust on classified forests differs considerably from the distribution of land on all trust lands. This is true for the state in total and for the individual land offices. For example, the Common School Trust accounts for about 90% of the total trust lands in the state, but only accounts for 66% of the Classified Forest Trust land and less than 44% of the Classified Forest Land in the Central Land Office. Public Buildings constitute 3.6% of all trust land but accounts for nearly 16% of

[3] The methodology used in this section of the report is consistent with the methodology used previous reports. For detailed methodology refer to the 2000 "Return on Asset" report.

Classified Forest Trust Land. The result of these differences is that contributions to revenue from classified forestland are likely to differ from revenue contributions from all trust land.

Table FOR - 2
A Comparison of the Land Distribution Between Trusts on Classified Forest Lands and all Trust Lands

	CLO		NWLO		SWLO		Total	
Trust	**% of CLO CF***	**% of All Trust land**	**% of NWLO CF***	**% of All Trust land**	**% of SWLO CF***	**% of All Trust land**	**% of All CF***	**% of All Trust land**
ACB	2.3%	0.8%	4.3%	3.8%	6.3%	4.3%	4.8%	0.6%
ACI		3.3%	1.2%	1.0%	1.6%	1.3%	1.3%	1.2%
CS	43.5%	76.3%	69.9%	71.8%	62.4%	74.7%	66.3%	89.8%
DDA	2.3%	2.0%	3.0%	2.9%	0.3%	0.4%	2.2%	0.7%
PB	10.9%	8.6%	14.0%	13.1%	20.8%	12.9%	15.9%	3.6%
SM	5.1%	2.1%	3.6%	3.5%	2.0%	1.7%	3.2%	1.1%
SRS	2.5%	2.7%	3.4%	3.2%	2.8%	1.7%	3.2%	1.2%
SNS	33.4%	4.0%	0.6%	0.3%	3.5%	2.1%	3.2%	1.3%
Univ		0.3%	0.1%		0.3%	0.9%	0.1%	0.4%

* Classified Forest

The asset value for classified forestland is given in Table FOR - 3. These estimates of asset value were derived using procedures identified in Title 15, Chapter 44, Part 1.

Table FOR - 3
Average Total Asset Value by Trust and Land Office
Net Classified Forest Acres Only
(2000 Dollars)

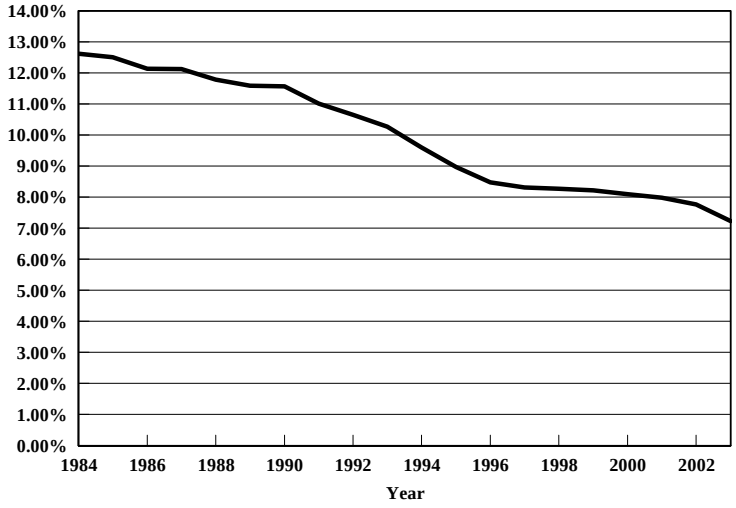
	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Total**
A.C.B.	$169,592	$8,101,702	$4,319,372	$12,590,666
A.C.I.	0	2,203,220	747,568	2,950,788
C.S.	3,726,462	142,096,377	40,462,500	186,285,339
D.& D. A.	369,418	5,847,964	182,245	6,399,626
P.B.	1,408,644	25,200,365	13,586,362	40,195,372
S.M.	669,322	6,786,664	1,302,056	8,758,042
S.N.S.	303,362	6,520,644	1,803,127	8,627,133
S.R.S.	2,640,420	1,268,986	2,639,349	6,548,755
Univ.	0	96,793	142,127	238,920
Total	$9,287,219	$198,122,715	$65,184,707	$272,594,640

While asset values increased by nearly $20 million or 8% between FY 2003 and FY 2004, the relative distribution of asset value changed little from last year primarily because the averaging of values limits the impact of the changes from any single year. The increase was focused on the common school trust. Because it is the largest trust in absolute terms the common school trust usually gains and loses value when the asset values change. The reason for the increase in trust asset value is related primarily to the increase in stumpage prices and partially to the decreasing interest rate.

Figure FOR - 1 shows the average interest rate charged by the Spokane Farm Credit District since 1984. This interest rate is the prime component of the capitalization rate used to compute the asset values shown in Table 3. Average tax rates are also used in

computing the discount rate, but the tax rate adds less than 1% to the interest rates. However, as the interest rates continue to fall, the average tax rate assumes more importance in the total discount rate calculation. The rate of interest decline has decreased in recent years. The expectation is that this trend will continue or even reverse itself in the next few years if the economy stabilizes and strengthens. If this happens, then the effects of the declining interest rates in maintaining the established asset values for forest lands will be diminished.

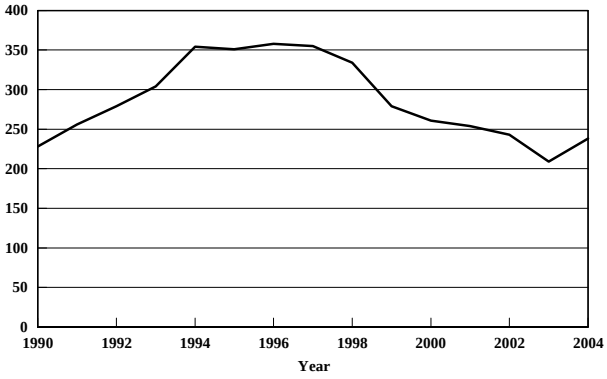
Figure FOR - 1
Farm Credit Bank Interest Rates



Source: Montana Department of Natural Resources and Conservation, Trust Land Management and the Spokane Farm Credit Bank District

Figure FOR - 2 shows the trend in stumpage fees. Stumpage rates increased in FY 2004. This year's increase was relatively large due a combination of strong domestic demand and to a decline in the value of the dollar relative to other currencies. The dollar has continued to lose value into the early part of FY 2005 and the housing market remains strong. The timber export issues with Canada are being resolved and the improved Japanese housing market appears to be holding up. These factors should help to maintain continued high stumpage prices.

Figure FOR - 2
Classified Forest Stumpage
Plus Forest Improvement Fees



: Montana Department of Natural Resources and Conservation, Trust Lands Management Division

Appreciation is determined by differencing the asset value for trust lands in the current year from the asset value for Classified Forestland 10 years ago. Because of the comparatively high price received during the early to mid-1990's and the price inflation adjustments, the asset value in recent years is not much different than it was ten years ago. This means that appreciation has been declining because of declining stumpage

rates and despite declining interest rates. In FY 2004, this changed and substantial price increases have resulted in an increase in appreciation for the fiscal year.

Table FOR – 4
Ten Year Average Annual Gross Revenue
From Commodity Sales
(2000 Dollars)

	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Total**
A.C.B.	$532	$223,770	$151,383	$375,686
A.C.I.	0	54,301	66,762	121,063
C.S.	300,237	2,532,052	1,205,181	4,037,470
D.& D. A.	153	167,144	6,655	173,952
P.B.	1,062	443,812	524,642	969,517
S.M.	1,317	159,438	53,848	214,603
S.N.S.	15,883	78,579	200,267	294,730
S.R.S.	20,052	22,632	116,559	159,243
Univ.	0	5,182	7,798	12,979
Total	$339,236	$3,686,910	$2,474,092	$6,500,239

The ten-year average gross revenue from commodity sales is shown in Table FOR - 4. The average is based on ten years of revenue through fiscal 2004 adjusted to 2000 dollars using the GDP price deflators published by the Bureau of Economic Analysis.

Average annual gross revenue increased by about $138,000 (2%) from last year's level. This is the result of losing the relatively low income from an earlier year and replacing it with higher income in the current year. The gross revenue will vary year-to-year depending on the relative size of the income earned in the current year compared to the inflation-adjusted income in the first year. This years results were consistent with the increased stumpage rates for FY 2004. If stumpage rates remain high, the increase in gross revenue should continue for the next few years

Net revenue reflects the difference between gross revenue and the State's expense of producing the various commodities that are available on classified forestland. Net revenue has remained nearly constant, increasing by $68,000. In percentage terms, this is slightly more than two percent (2%).

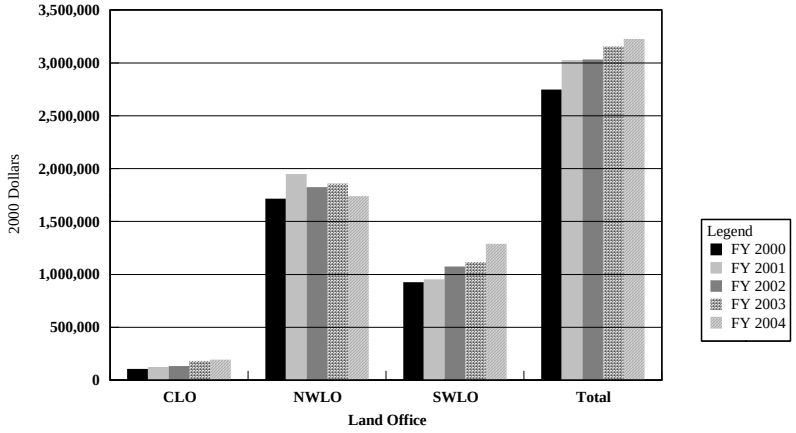
Ten-year average net revenues are up less than gross revenue. This implies that the average cost of producing the commodities has increased. The increase in expense is small.

Table FOR – 5
Ten Year Average Annual Net Revenue
From Commodity Sales
(2000 Dollars)

	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Total**
A.C.B.	$437	$105,429	$149,190	$255,056
A.C.I.	0	25,969	33,883	59,852
C.S.	166,968	1,197,525	625,996	1,990,490
D.& D. A.	82	78,060	5,660	83,802
P.B.	710	208,617	275,342	484,669
S.M.	1,121	74,497	28,518	104,136
S.N.S.	15,072	36,793	102,104	153,969
S.R.S.	11,183	10,559	62,445	84,187
Univ.	0	2,433	6,697	9,130
Total	$195,574	$1,739,881	$1,289,836	$3,225,290

Figure FOR - 3 gives a graphic comparison of ten-year average net revenue for the last four years. From Figure FOR – 3, it is easy to see that the combined total across all regions has increased this year and that the increase is reflected in all but the northwest land office. The Central Land Office's net revenue increased by 7%. This increase was considerably smaller than last year when the increase was 37%. The Northwest Land Office's net revenue decreased by 6%. The Southwestern Land Office's net revenue increased by 15% which is the largest of all of the land offices. The overall increase for FY 2004 was 2 %. This is a decrease from last year which had a growth rate of 4% with no land office showing a decrease in net revenue.

Figure FOR - 3
Ten-Year Average Annual Net Revenue from Commodity Sales
FY 2000 to FY 2004



Source: Montana Department of Natural Resources and Conservation, Trust Lands Division

The total return on assets for FY 2004 is up compared to FY 2003. The increase in both revenue and appreciation were the result of increased prices and the continued decline in interest rates. The reason for the higher appreciation values is the increase in timber prices that offset some of the decline in prices experience over most of the last ten years. The price increase is shown in Figure 2.

Table FOR - 6 shows the total return to assets for FY 2004. Most trusts showed a decrease in total assets compared to FY 2003; however, the Central Land Office had an increase in the total return on assets, whereas the Northwestern and Southwestern Land Offices both showed a decrease in the total return.

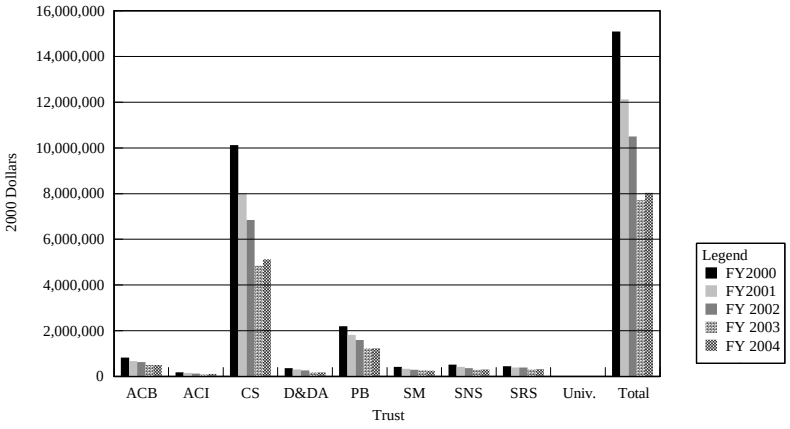
The total gain in return to assets from FY 2003 was $323,000, or an increase of 4.2%. This compares to last year's decrease of over $2.7 million or 26.6%. The previous year's loss was primarily due to

Table FOR - 6
Ten-Year Average Annual Return on Total Assets
By Trust and Land Office
(2000 Dollars)

	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Total**
A.C.B.	$8,637	$189,949	$300,573	$499,159
A.C.I.	0	48,250	58,516	106,767
C.S.	355,580	2,751,359	2,021,413	5,128,352
D.& D. A.	20,747	140,162	15,557	176,467
P.B.	79,203	462,254	685,209	1,226,666
S.M.	38,915	145,688	72,190	256,793
S.N.S.	32,250	105,516	162,603	300,369
S.R.S.	141,534	24,913	160,510	326,958
Univ.	0	3,373	11,375	14,748
Total	$676,867	$3,871,465	$3,487,948	$8,036,279

decreasing appreciation. This year's gain was primarily the result of increased revenue The Common School Trust had the largest gain over last year.

Figure FOR - 5
Annual Return to Total Assets by Trust
FY 2000 to FY 2004



Montana Department of Natural Resources and Conservation, Trust Lands Division

From Figure FOR – 5, it is easy to see that the average return, while increasing, is still considerably below the level of FY 2000. It will take several years at current stumpage rates to return to the FY 2000 level because of the averaging done in the determination of the return.

The rate of return on assets by land office and by trust for FY 2004 is shown in Table FOR - 7. The overall rate of return is down 0.2% from last year despite the increase in revenue for the FY 2004. The reason for the decrease is that the stumpage increases did not have as significant an impact on the return on assets as it did the asset value itself. If prices continue at their current level the average rate of return should show an increase in the future. The decrease in the rate of return with regard to the individual trusts is due to the small change in the rate of return from FY 2003

Regional changes which can be quite volatile are very consistent with last years level. This year only the Southwest Land Office showed any significant change in the overall rate of return increasing from 4.8% to 5.4%.

Table FOR – 7
Ten Year Average Rate of Return
On State Classified Forests
(2000 Dollars)

	Land Office			
Trust	**CLO**	**NWLO**	**SWLO**	**Total**
ACB	5.1%	2.3%	7.0%	4.0%
ACI	0.0%	2.2%	7.8%	3.6%
CS	9.5%	1.9%	5.0%	2.8%
DDA	5.6%	2.4%	8.5%	2.8%
PB	5.6%	1.8%	5.0%	3.1%
SM	5.8%	2.1%	5.5%	2.9%
SNS	10.6%	1.6%	9.0%	3.5%
SRS	5.4%	2.0%	6.1%	5.0%
Univ	0.0%	3.5%	8.0%	6.2%
Total	7.3%	2.0%	5.4%	2.9%

Summary

The estimated return on assets in FY 2004, reflecting stumpage price increases in FY 2004. The impact of the increase in FY 2004 stumpage prices was diminished by the averaging of returns for the last ten years. Commodity sales changes are large compared to last year, and should also have a positive impact on the return on assets in future years as additional revenue is generated from the same asset base.

Table FOR - 8 shows a comparison of acreage owned and net revenue earned by trust. The acreage and earnings are generally comparable; however, the distribution of earnings has changed somewhat since last year. The Common School Trust and Public Buildings are proportionately lower this year than in FY 2003. This has allowed trusts such as the MSU Trust and State Normal School Trusts to obtain a larger share relative to the trust acreage. The University of Montana Trust also remains above average.

Table FOR - 8
Proportion of Net Revenue Earned and Net Acreage by Trust

	Net Acres	Net Revenue
Trust	**% of total**	**% of total**
ACB	4.78%	7.19%
ACI	1.28%	1.86%
CS	66.30%	61.72%
DDA	2.17%	2.60%
PB	15.86%	15.03%
SM	3.18%	3.23%
SNS	3.16%	4.77%
SRS	3.16%	2.61%
Univ	0.11%	0.28%
Total	100.00%	100.00%

As indicated last year, the return in the long run should be fairly proportional to the acreage, although this could vary somewhat year-to-year due to differences in resource endowments.

The asset values derived from this methodology do not represent a market value of Montana's Classified Forest Land; they are a capitalization of a limited number of resource values into a land valuation. However, in a market situation, other values could make the market value of the land either higher or lower than the estimates derived in this analysis. Other considerations not included are access, scenic values, and intense agricultural use, to name a few. In addition, other areas may contain non-market values which are difficult to quantify and capitalize into the land value. Thus, this analysis does not necessarily represent the market value of the land. It does, however, represent a reasonable estimate of the value and return based on the current market uses.

Appendix

The appendix contains the analysis of each resource bureau's revenue generating activity on state trust lands. The analysis of each bureau's activity is independent of the other bureaus, but many of the analytical methods used are similar. Improved information made available has improved the accuracy of many of the available acreage numbers. The changes resulting from improved numbers have been adjusted for in order to minimize their impact. When changes are large, tables and figures will be utilized to show the effect of the improved land information. Revision of land data is an ongoing process so that there will continue to be changes year-to-year, however, future changes should be smaller than those occurring in the current year.

The table below indicates the basic method used in analyzing the returns to the trust generated by each bureau.

Montana Department of Natural Resources and Conservation
Methods Used to Value Resources by Bureau
State FY 2003

Bureau	Method of Analysis	Comments
Agriculture and Grazing	Capitalization	Adjusted for regional values
Forest Management	Capitalization	Distributed on acreage and revenue
Minerals	Discounted Reserve valuation and Capitalization	Distributed on acreage and Revenue
Real Estate	Adjusted Appraisals Capitalization	Distributed on acreage.

The asset value is based on individual year information rather than multi-year averages. This results in more volatile outcomes, but the information reflects the most current return on asset information available. As shown in the table above, the approach to asset valuation has been somewhat pragmatic and was generally determined by the information available. Direct appraisal information was always used if the information was available. Discounted values of a resource were used if a reasonable estimate of the future value of the resource was available. Capitalization was used as the last choice because of the circular nature of the method and the difficulty in identifying an appropriate capitalization rate.

Not all trusts in each land office earn revenue each year. The analysis of each of the individual trust revenue sources is analyzed independently of other trust revenue sources. This results in some of the trusts showing no return on assets from their trust lands in some Land Offices by a particular Bureau. An area may have earnings from other sources that are not part of their classification; e.g., Real Estate may have earnings on classified forestland. For this reason, the information in the main body of the report provides the most comprehensive information on trust returns.

A. CLASSIFIED TIMBER LANDS

One method used to determine the return on assets on Classified Forest Lands is prescribed in Montana law (77-1-223 MCA & 77-1-224 MCA). This analysis was completed and is included as the last section of the main report A second method, which is developed in this section of the appendix, is consistent with the approach used in analyzing the return on assets for other trust land resources. To maintain consistency, information derived from the second approach is used in the overall analysis of the return on assets for all trust lands.

Table A-1 shows the net classified forest by land office and by grant. These numbers have not changed since last year. Because trust land management is a dynamic process, reclassifications are likely to occur which will make future Classified Forest Lands differ from the ones in Table A-1.

Table A – 1
Montana Department of Natural Resources and Conservation
Classified Forest Acres by Land Office and Trust
FY 2004

	Land Office						
Trust	**NWLO**	**SWLO**	**CLO**	**NELO**	**SLO**	**ELO**	**TOTAL**
ACB	12,212	9,073	799	0	0	0	22,085
ACI	3,423	2,044	0	0	0	0	5,466
CS	209,357	95,603	13,507	642	0	0	319,109
DB	8,584	1,176	645	0	0	0	10,405
PB	40,591	29,176	2,643	0	0	0	72,410
SM	10,718	3,278	1,850	0	0	0	15,846
SNS	10,154	3,873	610	0	0	0	14,638
SRS	1,309	4,848	12,179	0	0	0	18,336
UM	364	1,708	0	0	0	0	2,072
TOTAL	296,713	150,778	32,234	642	0	0	480,368

Table A-2 shows the asset value by land office and trust on Classified Forest Lands. Capitalization of timber earnings is used to determine the asset value by land office and trust for timber. The capitalization rate used for FY 2004 is 7.23%, the same loan rate the Farm Credit Bank District of Spokane used to capitalize the value of forestlands under (77-1-223-225 MCA), the legislatively mandated return on asset report. In this case, the interest rate is for the current year rather than the average of the sum of the property tax rates and interest rates for a period of 5 years. This rate is a lending rate, not an earnings rate, and as such is inflated since it also includes a profit and risk margin for the banks. The actual earnings potential would reflect a lower rate. In addition to the capitalized forest earnings, other assets that are derived from earnings of other bureaus (Mining, Agriculture and Grazing, and Real Estate) are included as part of the asset value of classified forestland. Prorating on the basis of acreage is the

method used to determine the amount of assets from other activities allocated to classified forestland. The estimates of asset value from other activities are based on different techniques that are discussed under each of the activities. Use of the current year estimates rather than a multi-year average will cause more volatile changes in the asset value year to year, but will provide for a more current estimate of the asset value. Current year market interest rates contain components of risk, anticipated inflation and expected real price changes.

Table A – 2
Montana Department of Natural Resources and Conservation
Forested Land Asset Value by Land Office and Trust
State Classified Forests FY 2004
(Thousands of Dollars)

	Land Office						
Grant	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$135	$0	$0	$10,483	$0	$3,165	$13,782
ACI	$0	$0	$93	$2,876	$0	$824	$3,793
CS	$2,536	$0	$37	$170,958	$0	$31,480	$205,011
DB	$131	$0	$0	$7,367	$0	$161	$7,659
PB	$614	$0	$0	$33,168	$0	$10,021	$43,803
SM	$290	$0	$0	$8,705	$0	$1,019	$10,013
SNS	$139	$0	$0	$7,806	$0	$1,396	$9,342
SRS	$1,792	$0	$0	$1,394	$0	$1,778	$4,963
UM	$0	$0	$0	$137	$0	$130	$267
TOTAL	$5,636	$0	$130	$242,894	$0	$49,973	$298,633

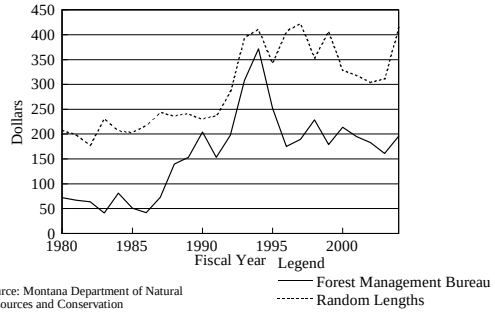
The fiscal year 2004 asset values have increased substantially over FY 2003 levels. The declining interest rates and the increase in timber prices is responsible for most of the increase in the asset value.

Table A – 3
Montana Department of Natural Resources and Conservation
Net Return on Forested Land by Land Office and Trust
State Classified Forests FY 2004
(Thousands of Dollars)

	Land Office						
Grant	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$6	$0	$0	$194	$0	$448	$648
ACI	0	0	1	536	0	15	553
CS	468	0	71	3,117	0	2,273	5,929
DB	5	0	0	137	0	5	147
PB	22	0	0	706	0	870	1,598
SM	11	0	0	166	0	17	194
SNS	5	0	0	293	0	23	321
SRS	169	0	0	78	0	148	395
UM	0	0	0	2	0	2	4
TOTAL	$687	$0	$72	$5,229	$0	$3,801	$9,789

Table A-3 shows the net return on assets on Classified Forest Lands for FY 2004. This includes all of the net revenue available for allocation to the trust from timber sales, net revenue from minerals, real estate revenue earned on Classified Forest Lands, and appreciation. Net revenue is gross revenue less forest improvement revenue and operating costs on classified forests plus net revenues from all other bureau activities on Classified Forest Lands.

Figure A - 1
Montana Deparment of Natural Resources and Conservation
Wood prices 1980 - 2004



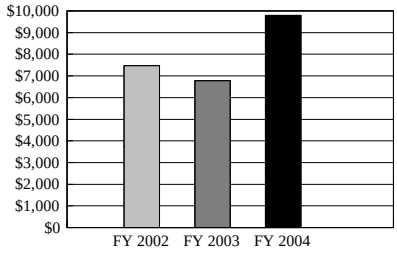
Source: Montana Department of Natural Resources and Conservation

Return has increased this year primarily due to the higher revenue received on forested lands. Figure A-1 shows the prices received on forest sales for the last 25 years. The average price for stumpage went from $161/mbf in FY2003 to $196/mbf in FY 2004. This was the result of several factors including the weakening of foreign currencies against the US dollar, a strengthening of Asian markets, particularly Japan, and the U.S. tariff against Canadian lumber imports. The result of these forces was an increase in the price on lumber as identified by the Random Lengths index price for lumber as well as the increase in the average bureau price for lumber

Earnings from other bureaus are included in Table A-3. To fully identify the earnings on Classified Forest Lands and the associated return on assets, net earnings from Real Estate and from Minerals on classified forests must also be included. These additional earnings are based on average earning per acre by trust and land office from the "other income" sources. These earnings were prorated to the different trusts based on the amount of land owned by the trust within a particular land office boundary. The "return" includes land appreciation. This results in some areas showing a return when no economic activity has occurred.

Figure A-2 shows a comparison of the estimated return on assets from forested lands for FY 2002 through FY2004. FY 2003 is 9.4% lower than FY 2002, however increased resource prices have made the FY 2004 return on assets 44% higher than the FY 2003 return on assets. This is primarily due to the increase in forest revenue between the two years caused by increasing stumpage prices.

Figure A - 2
Montana Department of Natural Resources and Conservation
Return on Assets From Forested lands FY 2002 - FY 2004
(Thousands of Dollars)



Source: Montana Department on Natural Resources and Conservation

Table A – 4 Montana Department of Natural Resources and Conservation Net Rate of Return on Classified Forests by Land Office and Trust FY 2004							
	Land Office						
Grant	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	4.5%	0.0%	0.0%	1.8%	0.0%	14.2%	4.7%
ACI	0.0%	0.0%	1.6%	18.6%	0.0%	1.9%	14.6%
CS	18.4%	0.0%	19.1%	1.7%	0.0%	7.2%	2.9%
DB	4.0%	0.0%	0.0%	1.9%	0.0%	3.0%	1.9%
PB	3.7%	0.0%	0.0%	2.1%	0.0%	8.7%	3.6%
SM	3.8%	0.0%	0.0%	1.9%	0.0%	1.6%	1.9%
SNS	3.9%	0.0%	0.0%	3.7%	0.0%	1.6%	3.4%
SRS	9.4%	0.0%	0.0%	5.6%	0.0%	8.3%	8.0%
UM	0.0%	0.0%	0.0%	1.6%	0.0%	1.6%	1.6%
TOTAL	12.2%	0.0%	55.5%	2.1%	0.0%	7.6%	3.3%

Table A-4 shows the rate of return on assets on Classified Forest Lands. This rate includes earnings from all other classified forest uses in addition to the return from timber harvests. Appreciation is also included as part of the rate of return.

Rates of return vary substantially between regions and trusts depending on earnings appreciation and the contribution of non-classified producers to earnings. Some areas with no timber activities show earnings from other sources, some from appreciation. These rates of return will vary substantially year to year, depending on the economic activity occurring within each trust and land office. The asset value will also vary year to year depending on the real interest rate and current year activity on the forests. The average rate of return this year was slightly under 3.3% up from last years rate of return of 2.6%. This represents an increase of slightly more than 25%. The rate of return on revenue was 1.6%.

B. Real Estate Lands

Real estate lands had a modest change in land acreage. Real estate acreage decreased by about 750 acres from the FY 2003 level because updated land information.

Real estate programs included under this analysis are cabin site leasing, special leases and licenses, land use licenses and recreational use licensing. All of the programs differ substantially in information and characteristics. The Rights-of-Way and Land Sales programs are not included in the analysis, since these activities involve an exchange of assets, money for land, or a program expense. The money from land sales is deposited into the permanent fund, where it can earn money for the trust through other investments.

The land base for real estate is very small relative to the land base for other bureaus. A substantial share of the money from Real Estate comes from fees on

lands classified as forested, grazing and agriculture. The rate of return on many of the Real Estate activities is relatively high, however, because the revenue is dominated by cabin site leases and licenses that have a limited earnings potential (3.5% to 5% of the appraised value[4]), the overall rate of return is lower than would be otherwise expected.

Table B – 1 shows the estimated acreage specific to Real Estate. Total acreage for FY 2004 is 21,317 acres.

Table B – 1
Montana Department of Natural Resource and Conservation
Total Net Real Estate Bureau Acres by Land Office and Trust
Classified "other" lands FY 2004

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	440			49		355	844
ACI	636	0	0	3	20	0	658
CS	11,612	200	1,378	1,218	2,171	275	16,855
DB	372		0	43		20	435
PB	1,693	0	0	106		26	1,825
SM	211	0	6	201		0	418
SNS	53	0	80	51		14	198
SRS	2	0	5	0	0	60	67
UM	17	0	0	0	0	0	17
Total	15,037	200	1,469	1,671	2,191	750	21,317

Table B-1 shows the estimated acreage classified as "other" that are specific to real estate. Real estate programs cover a significantly larger amount of the total trust surface acreage, than the lands identified in Table B-1. Programs such as the Recreational Use licensing program cover virtually the entire state but occur almost entirely on lands whose primary use is under the management of one of the other trust land bureaus. The acreage numbers are anticipated to change yearly as new programs to enable the Trust Land Management Division to earn more money for the trusts through real estate management are implemented.

The determination of asset value in Real Estate is a combination of several techniques. In some instances, direct appraisal information is available. Most cabin sites have direct appraisal information available, some Real Estate sites also have appraisal information available. The appraisals are, for the most part, "out of date." Cabin site appraisals are currently in the process of being updated, but were not available for this analysis. For purposes of this analysis, the most recent appraisal was used and updated to an estimated FY 2004 value using the implicit price deflators published by the Bureau of Economic Analysis. This approach

[4] The Land Board raised the rate to 5% in 1999. This rate has been "phased in" annually on all lease renewals since 1999. This increase is reflected in the Real Estate returns.

adjusts for general price increases but does not reflect price changes due to market changes specific to an industry. The reappraisal process recognizes industry-specific changes and results in better estimates of the market value of the land. The reappraisals should be available for next year's report. Real Estate lands that did not have an appraisal were valued using capitalization. Over 80% of the asset value comes from adjusted appraisal data.

Table B – 2
Montana Department of Natural Resources and Conservation
Total Net Real Estate Asset Value by Land Office and Trust
Classified "other" Lands FY 2004 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$2,963	$0	$0	$330	$0	$2,394	$5,687
ACI	$4,283	$0	$0	$17	$135	$0	$4,435
CS	$78,238	$1,417	$9,371	$8,208	$14,685	$1,851	$113,770
DB	$2,506	$0	$0	$288	$0	$132	$2,927
PB	$11,403	$0	$0	$714	$0	$173	$12,290
SM	$1,423	$0	$40	$1,357	$0	$1	$2,820
SNS	$359	$0	$543	$342	$0	$97	$1,342
SRS	$17	$0	$32	$0	$0	$404	$453
UM	$112	$0	$0	$0	$0	$0	$113
TOTAL	$101,306	$1,417	$9,986	$11,256	$14,819	$5,053	$143,838

Table B – 2 shows the Real Estate estimated asset value for FY 2004. The comparatively large per acre asset value results from the higher value asset that characterize most of the land classified as Real Estate. Cabin sites and land in proximity to urban areas is generally of higher value than land whose primary purpose is timber production, or land used for agricultural purposes. The asset estimate includes the estimated value of the minerals on Real Estate lands as well as an estimate of the agricultural and timber values. Both agriculture and timber values are small.

The annual return to total assets is calculated by distributing the Real Estate revenue earned on non-Real Estate lands to the program where they are earned. Revenues earned by other programs (Minerals etc.) on Real Estate lands are then added back to the Real Estate return accrual. Finally, any estimated appreciation that occurred on Real Estate lands was added to the revenue accrual. This is the annual return to total assets shown in Table B-3. This table represents the estimated earnings (appreciation and net revenue) from all sources on Real Estate lands for FY 2004.

The return is generally largest on those trusts and land offices that have the most acreage. Common Schools have nearly 90% of the Trust Land in the state and have earned the largest share of revenue. The second largest trust, Public Buildings, received less than 25% of the revenue received by Common Schools. The total return of $7,667,000 is 71% more than the return reported last year.

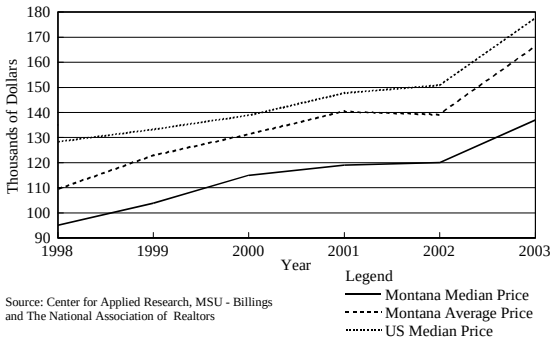
Most of the difference is attributable to the change in resource prices and appreciation between the two years.

Table B – 3
Montana Department of Natural Resources and Conservation
Net Return to Assets by Land Office and Trust
Real Estate "other" Land FY 2004 (Thousands of Dollars)

	Land Office						
Grant	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$89	$1	$3	$26	$0	$330	$449
ACI	130	2	8	9	13	0	162
CS	2,479	208	706	357	500	875	5,124
DB	76	1	2	23	0	16	117
PB	348	6	0	24	2	828	1,208
SM	46	0	8	258	1	1	313
SNS	18	1	21	21	1	7	70
SRS	29	1	1	0	0	169	200
UM	11	1	12	0	0	0	23
TOTAL	$3,225	$220	$762	$718	$517	$2,226	$7,667

Figure B - 1 shows the average prices for housing in the US and Montana for the last 5 years. The median (middle) price for Montana housing is shown for the same period. The average rate of increase in prices between 1998 and 2003 is 7.2% per year. While average prices leveled in 2002, in 2004 the prices increased substantially both in the U.S. as a whole and in Montana No similar figures for commercial real estate are available, but there is also an increase in commercial property values. The increasing property values are reflected in the return to assets in the appreciated value of the Real Estate assets. This appreciation is second most important contributor to the increased return to assets shown in Table B – 3.

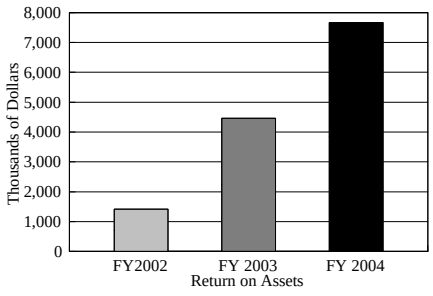
Figure B - 1
Montana Deparment of Natural Resources and Conservation
Housing Costs



Source: Center for Applied Research, MSU - Billings and The National Association of Realtors

Figure B-2 shows the actual return on assets for FY 2002 through FY 2004 and From figure B-2 it is clear that the

Figure B - 2
Montana Department of Natural Resources and Conservation
Real Estate Bureau Return to Assets FY 2002 - FY 2004



Source: Montana Department of Natural Resources and Conservation

return on assets for the Real Estate Bureau is nearly doubling every year.

Table B-4 presents the rate of return on the assets by land office and trust for FY 2003. The rates to do not vary substantially because some of the revenues were prorated based on acreage.

Table B – 4
Montana Department of Natural Resources and Conservation
Rate of Return on Assets by Land Office and Trust
Real Estate Bureau FY 2004

	Land Office						
Grant	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	3.0%	0.0%	0.0%	8.0%	0.0%	13.8%	7.9%
ACI	3.0%	0.0%	0.0%	51.6%	9.5%	0.0%	3.7%
CS	3.2%	14.6%	7.5%	4.3%	3.4%	47.3%	4.5%
DB	3.0%	0.0%	0.0%	7.9%	0.0%	11.8%	4.0%
PB	3.1%	0.0%	0.0%	3.3%	0.0%	47.8%	9.8%
SM	3.3%	0.0%	19.0%	19.0%	0.0%	47.8%	11.1%
SNS	5.1%	0.0%	3.9%	6.2%	0.0%	7.2%	5.2%
SRS	16.7%	0.0%	3.7%	0.0%	0.0%	41.9%	44.2%
UM	9.4%	16.6%	26.1%	0.0%	0.0%	0.0%	20.6%
TOTAL	3.2%	15.5%	7.6%	6.4%	3.5%	44.1%	5.3%

The average rate of return was 5.3% in FY 2004. This is a 60% increase from the 3.3% return in FY2003. The primary reason for the increase in the rate of return is because of the earnings on property and higher resource values.

The return varied by region and trust. The overall average is usually close to the return on common school lands because common school lands dominate other trusts in terms of size. In some cases, the return is large for some land office/ trust combinations compared to the overall rate of return. This occurs because the proportion of the total value is quite small relative to the total so that the impact on the total return is small. The large return often results because there is another resource such as minerals or forests that contribute to the Real Estate return resulting in a comparatively large rate of return for an individual trust within a land office.

C. AGRICULTURE AND GRAZING LANDS

The net agricultural acreage was determined from reports generated by the Trust Land Management System from data provided by the states' central system. This difference has made substantial differences in the estimates of agricultural asset values and the total agricultural return. Agricultural land comprises the largest share of state trust surface lands, accounting for over 91% of all surface trust lands. Tables C – 1 and C – 2 show the total "farmed" and total grazing acres.

Table C – 1 Montana Department of Natural Resources and Conservation Total Farming Acres by Land Office and Trust FY 2004							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	81	0	0	0	0	7	88
ACI	191	0	1,440	3	0	0	1,635
CS	113,748	59,538	356,442	1,043	19,343	1,156	551,269
DB	544	0	833	0	0	0	1,377
PB	3,020	0	1,070	4	0	0	4,094
SM	4,711	0	1,531	0	0	0	6,242
SNS	870	0	1,711	0	0	0	2,582
SRS	531	0	469	0	0	0	1,001
UM	497	709	730	25	0	59	2,019
Total	124,194	60,247	364,226	1,075	19,343	1,222	570,307

Table C – 2 Montana Department of Natural Resources and Conservation Total Grazing Acres by Land Office and Trust FY 2004							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	8,177	0	0	0	0	229	8,406
ACI	36,724	480	13,486	22	3,558	1,358	55,628
CS	837,626	901,064	1,554,695	15,142	359,154	77,347	3,745,027
DB	21,222	0	3,027	0	0	0	24,249
PB	92,750	1,524	13,075	29	0	1,562	108,939
SM	19,331	228	17,047	320	0	40	36,967
SNS	29,483	723	15,817	0	0	42	46,064
SRS	34,330	141	11,001	0	3,249	0	48,720
UM	3,167	1,985	8,691	179	480	578	15,080
Total	1,082,809	906,145	1,636,839	15,692	366,441	81,156	4,089,081

The distribution of agricultural acres is substantially the same as it was last year. A few minor adjustments to the acreage have been made, but in percentage terms these adjustments amount to less than a 1% change from the acreage distribution in FY 2003.

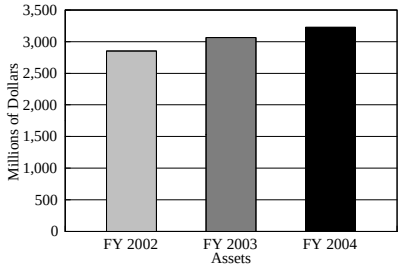
The majority of the assets and the return on assets for Mineral lands are included as part of the assets and return on the Agricultural and Grazing lands.

Table C – 3
Montana Department of Natural Resources and Conservation
Total Net Agriculture and Grazing Assets by Land Office and Trust
FY 2003 (Thousand of Dollars)

	Land Office						
Grant	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$3,803	$0	$0	$0	$0	$113	$3,917
ACI	$16,780	$324	$9,432	$19	$1,891	$590	$29,035
CS	$589,490	$720,548	$1,451,055	$8,532	$228,284	$35,780	$3,033,689
DB	$10,507	$0	$3,074	$1	$0	$0	$13,582
PB	$47,222	$920	$8,587	$21	$0	$680	$57,430
SM	$17,505	$153	$11,282	$139	$0	$17	$29,095
SNS	$14,805	$356	$11,021	$0	$0	$19	$26,199
SRS	$16,385	$94	$6,250	$0	$1,732	$0	$24,462
UM	$2,349	$2,792	$5,627	$125	$255	$361	$11,508
TOTAL	$718,846	$725,186	$1,506,327	$8,837	$232,163	$37,560	$3,228,919

Agricultural and Grazing values on state trust lands are determined separately by identifying the average Agriculture and Grazing value using estimates from the Department of Revenue, then adjusting these values to trust land use levels (e.g., lower grazing rates on trust lands compared to private lands). Finally, the estimates are regionalized based on land values identified in the Census of Manufacturing, published by the U. S. Census Bureau. The separate Agriculture and Grazing rates were then combined based on the proportion of agriculture and grazing acres in each county. Finally, assets and returns are added from minerals and other sources. Asset value on Agriculture and Grazing lands constitutes the largest share of total asset value.

Figure C - 1
Montana Deparment on Natural Resources and Conservation
Asset Values FY 2002 - FY 2004



Source: Montana Department of Natural Resources and Conservation

The total asset value on agricultural lands was $3,228,919,000 in FY 2004 compared to the estimated value in FY 2003 of $3,063,212,000. Nearly all of the increase is the result of the increase in resource values for both agriculture and other trust resources. Figure C – 1 shows a comparison of the last three years. Nearly all of the increase over the three-year period is the result of increase resource prices and a small increase in agricultural acreage.

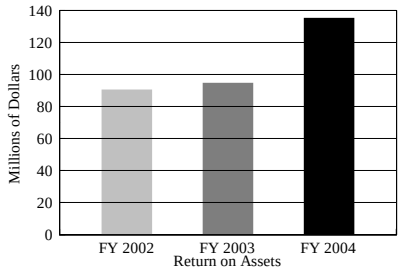
Table C – 4 shows the total return to assets on agricultural lands.

Table C – 4
Montana Department of Natural Resources and Conservation
Agriculture and Grazing Return on Assets by Land Office and Trust
State FY 2004 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	$123	$0	$0	$0	$0	$6	$129
ACI	554	15	516	0	50	15	1,149
CS	18,128	29,177	73,516	182	6,061	838	127,903
DB	336	0	159	1	0	1	498
PB	1,483	45	453	1	0	28	2,009
SM	556	7	653	4	0	2	1,222
SNS	461	22	594	1	1	1	1,079
SRS	523	5	358	0	48	4	938
UM	107	86	313	2	7	7	522
TOTAL	$22,270	$29,356	$76,562	$192	$6,167	$902	$135,449

The return on assets for FY 2004 was 43% higher compared to the FY 2003 return on assets. Figure C – 2 shows the return on assets for FY 2002 through FY 2004. The large increase in the return on assets for FY 2004 was the result of primarily increased prices and revenue for minerals. Since a prorated portion of the subsurface mineral returns are included as part of the surface return, agriculture and grazing shows the greatest benefit from the large growth in mineral prices and revenue.

Figure C - 2
Montana Department of Natural Resources and Conservation
Return on Assets FY 2002 - FY 2004



Source: Montana Department of Natural Resources and Conservation

Table C – 5 shows the rate of return on assets. The average rate of return in FY 2003 was 3.1%. The average rate of return for FY 2004 was 35% higher at 4.2%. The increase in FY 2004 was due primarily to the increase in receipts from all bureaus except agriculture and grazing. Similar to last year, some rates of return are very high as a result of small acres with comparatively large appreciation.

Table C – 5 Montana Department of Natural Resources and Conservation Agriculture and Grazing Rate of Return on Assets by Land Office and Trust Agriculture and Grazing Bureau FY 2004							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	3.2%	0.0%	0.0%	0.0%	0.0%	5.2%	3.3%
ACI	3.3%	4.6%	5.5%	2.0%	2.6%	2.5%	4.0%
CS	3.1%	4.0%	5.1%	2.1%	2.7%	2.3%	4.2%
DB	3.2%	0.0%	5.2%	11.3%	0.0%	0.0%	3.7%
PB	3.1%	4.9%	5.3%	3.9%	0.0%	4.1%	3.5%
SM	3.2%	4.4%	5.8%	3.2%	0.0%	8.9%	4.2%
SNS	3.1%	6.1%	5.4%	0.0%	0.0%	5.6%	4.1%
SRS	3.2%	5.2%	5.7%	0.0%	2.8%	15.6%	3.8%
UM	4.6%	3.1%	5.6%	1.9%	2.6%	1.9%	4.5%
TOTAL	3.1%	4.0%	5.1%	2.2%	2.7%	2.4%	4.2%

D. MINERAL LANDS

The trusts own about 6,300,000 acres in mineral rights. These rights are divided in coal, oil and gas, and other minerals. From a revenue-generating standpoint, coal, oil and gas generated about 98% of the mineral resource revenue in FY 2004, and the remaining 2% came from all other sources, mostly sand and gravel extraction. Because the extraction of different minerals is generally not mutually exclusive, the value of the minerals and the asset values of each mineral is additive. Each mineral's asset value is estimated separately and then added to achieve a total value. The subsurface values can be added to the surface values to obtain a total estimate of values for the trust. This section provides the distribution of acreages by trust and land office and utilizes this information in conjunction with earnings to develop an asset value and rate of return on mineral properties.

Tables D-1a through D-1c show the acreage associated with each of the mineral resources. The largest number of acres is associated with oil and gas, followed by coal and then other minerals.

Table D – 1a
Montana Department of Natural Resources and Conservation
Total Coal Subsurface Acres by Land Off ice and Trust
FY 2004

Trust	CLO	ELO	NELO	NWLO	SLO	SWLO	Total
ACB	22,818		40	12,732	0	11,487	47,077
ACI	41,777	480	21,870	4,000	5,178	3,655	76,960
CS	1,382,944	943,879	2,223,585	262,068	423,572	212,493	5,448,542
DB	25,367		4,309	9,659	0	1,835	41,171
PB	136,225	1,080	18,119	40,574	0	32,312	228,310
SM	42,704	228	26,492	12,176	0	4,667	86,267
SNS	49,461	28	19,369	10,166	0	4,516	83,540
SRS	50,729	141	12,875	1,469	3,850	9,061	78,125
UM	9,681	3,165	16,712	524	1,120	2,553	33,754
Total	1,761,706	948,828	2,343,372	353,368	433,720	282,580	6,123,747

Table D – 1b
Montana Department of Natural Resources and Conservation
Total Oil and Gas Subsurface Acres by Land Office and Trust
FY 2004

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	22,373			12,732	0	11,487	46,592
ACI	41,777	480	21,870	4,000	5,178	3,655	76,960
CS	1,350,477	1,014,746	2,339,728	262,172	434,190	207,222	5,608,537
DB	25,367		4,309	9,659	0	1,835	41,171
PB	92,941	1,080	5,505	40,974	0	32,312	172,812
SM	42,704	228	26,492	12,176	0	4,667	86,267
SNS	49,461	723	15,558	10,166	0	4,516	80,424
SRS	50,457	141	8,510	1,469	3,850	9,061	73,488
UM	9,681	3,165	16,712	524	1,120	2,553	33,754
Total	1,685,238	1,020,390	2,438,685	353,872	444,338	277,309	6,220,006

Table D – 1c Montana Department of Natural Resources and Conservation Total Other Mineral* Subsurface Acres by Land Office and Trust FY 2004							
	Land Office						
	CLO	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	20,578		40	12,660		9,740	43,017
ACI	38,262	480	16,310	3,880	5,018	3,495	67,445
CS	1,243,870	1,005,326	2,127,556	251,938	409,456	182,555	5,220,702
DB	24,132		3,680	8,667		1,475	37,955
PB	118,188	1,617	18,857	40,377		30,510	209,549
SM	34,331	228	19,105	11,240		3,867	68,771
SNS	42,237	723	21,401	10,125		4,176	78,662
SRS	48,527	141	12,755	1,469	3,249	5,942	72,083
UM	5,026	2,694	10,061	364	480	1,917	20,541
Total	1,575,151	1,011,036	2,229,765	340,719	418,203	243,677	5,818,723
* Includes all minerals except coal, oil, and gas							

Coal, oil and gas asset values are calculated by first estimating known reserves. The asset value is estimated by multiplying the current price times the estimated production for the life of the field or deposit, estimating a net revenue based on historic industry costs, and discounting this net revenue stream back to its present value, using the known reserves and recent production levels to determine the duration of production.

In estimating reserves on coal, and in particular on oil and gas, the reserves vary with the price; as the price increases, additional oil, gas, and coal become economic to produce, and the size of the reserve estimate increases. Conversely, if prices fall, less oil, gas or coal becomes economic to produce, and the reserve estimate falls. For the purpose of this analysis, it was assumed: 1. The current price will hold throughout the entire production of the field; 2. Only known reserves, reserves based upon current producing fields are used in the estimate; and 3. Production will continue at its current rate until the estimated reserves are depleted.

The federal government publishes known Mineral reserve estimates for each State of the United States. This reserve estimate was used as the basis of estimating the asset value for minerals in the State of Montana. The analysis assumes that, on average, the occurrence, type and volume of reserves is the same on State-owned Trust Lands as the rest of the state. The method used to estimate the asset value for each different mineral category is discussed below. A summary of the all mineral commodity asset values is shown in table D-2.

New acreage estimates have not changed the total acres to the extent that it did for agriculture and Real Estate did. While the acreage changes will have a small

effect other factors such as price changes are much more important factor in changes to asset values and rates of return. Table D – 2 shows the Asset value for all minerals.

Table D – 2
Montana Department of Natural Resources and Conservation
Total Mineral Asset Value by Land Office and Trust
FY 2004 (Thousands of Dollars)

	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
ACB	$466	$0	$0	$6	$0	$4	$476
ACI	870	62	1,855	2	196	2	2,986
CS	25,154	123,329	210,680	115	17,864	83	377,224
D&DA	528	0	366	4	0	1	899
PB	1,947	132	494	18	0	14	2,605
SM	886	30	2,248	5	0	2	3,170
SNS	1,028	58	1,345	5	0	2	2,437
SRS	1,051	18	729	1	159	3	1,962
UNIV	200	385	1,414	0	35	1	2,036
Total	$32,130	$124,014	$219,131	$156	$18,254	$111	$393,795

For oil and gas, asset estimates are made using the estimated profit from oil production to determine net industry rate profit. The profit level is obtained from data published by the Energy Information Administration and the U. S. Geological Survey. The asset value of the field is determined by first multiplying the rate of profit by the Montana price per barrel and multiplying this amount by the current production level extended until the field is depleted. This revenue stream is then discounted back at 4% to its present value. This number is the estimated asset value. A similar approach is used to determine the asset value of gas. The value for oil and gas is relatively large because of the relatively large profit margins.

A similar method is used for coal but, because of the lower profit margins for coal, the annual value of the income stream is much smaller[5]. However, the large size of the reserve extends the production period and increases the asset value. In addition, all of the national forecasts are predicting a decline in the price of coal into the foreseeable future. Environmental restrictions make it more difficult to utilize coal in the production of energy than other energy minerals. Another limit on Montana's coal reserve estimates is that Montana has large quantities of relatively low-grade coal, which increases costs in the production of energy. For

[5] The smaller income stream to producers has little short-term impact on the revenue received by the state for its coal royalties. The lower income level has a significant impact on the asset value of the reserves.

these reasons, the time period used to estimate the asset value of coal reserves was limited to thirty years.

Assets for other minerals (mostly sand and gravel) were estimated by capitalizing the current level of production using a 7.2% average corporate bond Yield rate.

Table D – 3
Montana Department of Natural Resources and Conservation
All Minerals Return to Assets by Land Office and Trust
FY 2004 (Thousands of Dollars)

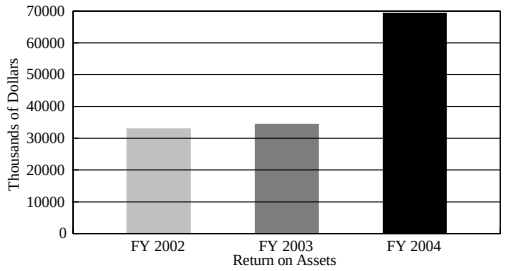
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NW LO**	**SLO**	**SWLO**	**TOTAL**
ACB	$75	$0	$0	$0	$0	$2	$77
ACI	146	7	351	0	19	0	524
CS	5,207	17,643	37,409	25	6,384	7	66,675
DB	86	0	59	1	0	0	145
PB	339	16	77	-4*	0	0	428
SM	143	3	391	1	0	0	538
SNS	168	10	223	0	0	0	401
SRS	189	2	116	0	14	1	321
UM	33	41	231	0	4	0	308
TOTAL	$6,385	$17,721	$38,857	$24	$6,421	$11	$69,487

* The negative return shown here results from a prepayment refund

The return on assets for FY 2004 is show in Table D – 3. The return from mineral lands is twice the FY 2003 amount. The FY 2003 return was $34,499,000 compared to $69,487,000 in FY 2004. The increase is due to almost entirely to an increase in resource values, particularly oil and gas prices. The higher prices also resulted in higher net revenue from minerals which increased from $11,311,000 in FY 2003 to $15,170,000 in FY 2004.

Figure D – 1 shows the return on total assets for FY 2002 though FY 2004. The return is up strongly in FY 2004.

Figure D - 1
Montana Department of Natural Resources and Conservation
Return on Assets - Minerals



Source: Montana Department of Natural Resources and Conservation

Table D – 4 Montana Department of Natural Resources and Conservation Total Return to Mineral Assets by Land Office and Trust FY 2004							
	Land Office						
Trust	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**TOTAL**
ACB	16.0%	0.0%	0.2%	8.0%	0.0%	44.6%	16.2%
ACI	16.8%	10.8%	18.9%	2.5%	9.7%	2.6%	17.5%
CS	20.7%	14.3%	17.8%	22.0%	35.7%	8.7%	17.7%
DB	16.2%	0.0%	16.0%	15.4%	0.0%	6.9%	16.1%
PB	17.4%	12.1%	15.6%	-20.7%	0.0%	2.3%	16.4%
SM	16.2%	9.6%	17.4%	18.4%	0.0%	2.5%	17.0%
SNS	16.4%	17.3%	16.6%	2.6%	0.0%	2.5%	16.5%
SRS	17.9%	9.6%	15.9%	1.2%	8.7%	42.5%	16.4%
UM	16.4%	10.6%	16.3%	2.6%	10.9%	2.6%	15.2%
TOTAL	19.9%	14.3%	17.7%	15.3%	35.2%	9.8%	17.6%

As with the return on assets, the rate of return on assets is up strongly in FY 2004. The rate of 17.6% in FY 2004 is up 6.5% over the rate in FY 2003. The reason that the rate of return did not double like the total return is that the asset value increased strongly in FY 2004 also. Minerals continue to have the largest overall rate of return.

E. Employee distribution and expenses

The allocation of expenses between land offices is based on several factors the most important factor is the distribution of employment between the land offices. Table E – 1 shows the distribution of employees between land offices. Headquarters or regional administrative employees are allocated based on the distribution of regional employees. Fractional employment represents employees who work in one or more bureaus or land offices. The table does not include employees funded through either FI monies or general fund monies. Total employment is 127.

Table E – 1 Montana Department of Natural Resources and Conservation Employment Allocated between Bureaus and Land Offices FY 2004							
	Land Office						
Bureau	**CLO**	**ELO**	**NELO**	**NWLO**	**SLO**	**SWLO**	**Total**
Forestry	3.40	1.10	0.44	39.21	0.55	21.52	66.21
Ag/Grazing	6.85	4.91	9.86	0.00	2.08	0.00	23.70
Real Estate	2.97	0.00	0.48	8.82	2.01	2.98	17.25
Mineral	1.43	2.91	4.27	0.00	1.43	0.00	10.03
Total	14.64	8.92	15.05	48.03	6.06	24.50	117.20

Table E–1
Montana Department of Natural Resources and Conservation
Total Acres by Bureau and Land Office and Trust

Land Office		ACB	ACI	CS	DDA	PB	SM	SNS	SRS	Univ.	Total
NWLO	Ag& Grazing	-	-	14,387	-	-	320	-	-	-	14,707
	Forest	12,212	3,398	209,153	8,584	40,591	10,718	10,154	1,309	160	296,247
	Minerals	12,732	4,000	262,172	9,659	40,974	12,176	10,166	1,469	524	353,872
	Real Estate	49	3	1,218	43	106	201	51	-	-	1,671
SWLO	Ag& Grazing	236	1,451	78,353	-	1,457	-	40	-	209	81,746
	Forest	9,073	2,137	95,314	1,176	29,029	3,827	3,871	4,928	1,280	150,636
	Minerals	11,487	3,655	207,222	1,835	32,312	4,667	4,516	9,061	2,553	277,309
	Real Estate	355	-	275	20	26	-	14	60	-	750
CLO	Ag& Grazing	8,258	36,922	866,159	21,758	95,242	24,045	30,324	34,532	3,663	1,120,906
	Forest	800	-	13,402	640	2,564	1,267	585	11,270	-	31,028
	Minerals	22,373	41,777	1,350,477	25,367	92,941	42,704	49,461	50,457	9,681	1,685,238
	Real Estate	440	636	11,612	372	1,693	211	53	2	17	15,035
NELO	Ag& Grazing	-	14,926	1,996,077	3,860	14,301	18,579	17,529	11,470	9,420	2,086,663
	Forest	-	-	800	-	-	-	-	-	-	800
	Minerals	-	21,870	2,339,728	4,309	3,505	26,492	15,505	8,510	16,712	2,438,685
	Real Estate	-	-	1,328	-	-	6	80	5	0	1,469
SLO	Ag& Grazing	-	3,556	379,351	-	-	-	-	3,249	480	386,635
	Forest	-	-	-	-	-	-	-	-	-	-
	Minerals	-	5,178	434,190	-	-	-	-	3,850	1,120	444,338
	Real Estate	-	20	2,171	-	-	-	-	-	-	2,191
ELO	Ag& Grazing	-	480	962,150	-	1,524	228	723	617	2,694	968,416
	Forest	-	-	-	-	-	-	-	-	-	-
	Minerals	-	480	1,014,746	-	1,080	228	723	141	3,165	1,020,390
	Real Estate	-	-	200	-	-	-	-	-	-	200
Total	Ag& Grazing	8,496	57,335	4,296,977	25,619	112,525	43,172	48,347	49,868	16,468	4,659,074
	Forest	22,085	5,535	318,668	10,400	72,151	15,813	14,611	18,002	1,440	478,711
	Minerals	46,592	76,960	5,608,537	41,172	172,812	86,267	80,424	73,488	33,754	6,220,006
	Real Estate	844	658	16,855	435	1,825	418	198	67	17	21,317